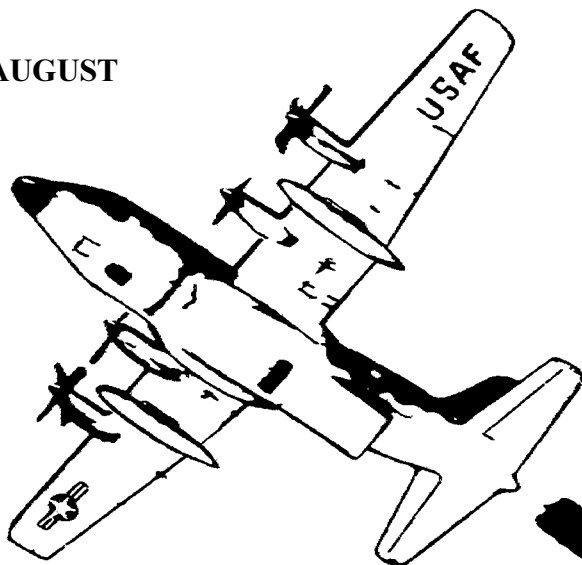


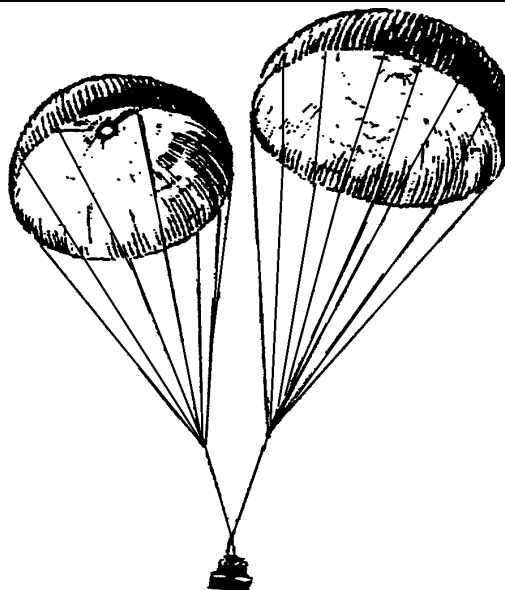
MAY - AUGUST

VOLUME II 2000



TRIENNIAL

**AIRDROP REVIEW
AND
MALFUNCTION/SAFETY
ANALYSIS**



PREPARED BY
THE US ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA 23801-1502

AIRBORNE CREED

I am an Airborne trooper! A paratrooper!

I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.

I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.

I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.

I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.

I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.

I have pride in the Airborne! I never let it down!

In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.

In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.

My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.

I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.

*I am a trooper of the sky! I am my Nation's best!
In peace and war I never fail. Anywhere, anytime, in anything—
I am AIRBORNE!*

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PREFACE

The Airdrop Review and Malfunction/Safety Analysis is published by the US Army Quartermaster School in hopes that by “passing the word” the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 May 2000 - 30 August 2000.

POC AND MAILING ADDRESS

The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:

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REPORTS AND ANALYSES

The Malfunction/Safety Review Board met at Fort Lee, Virginia on 18 - 19 October 2000. A breakdown of the areas in which malfunctions occurred from 1 May through 31 August 2000 follows:

<u>CATEGORY</u>	<u>QUANTITY</u>
Containers/CRRC	12
Platforms	
LVAD	31
Personnel	57
Aircraft	21

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

PERSONNEL MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Twin Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 7000 AGL	10. ACFT SPEED (Knots) 85	11. DZ ELEVATION (Feet) 720	12. SURFACE WINDS (Knots) 040/5	13. VISIBILITY (Feet/Miles) 2+	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4, FF-2, Gentex Helmet, Alfimeter, Go		16. JUMPER'S POSITION IN ACFT 1/3	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 75
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag Lock	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper was given a thorough jumpmaster brief in the classroom. Included in the brief was the Free Fall Emergency Procedures video. The jumper departed for the DZ. The jumper was given a JMPI prior to the first lift. The jumper correctly followed all of the Jump Master's instructions during the flight to altitude. The jumper was on the first lift/first pass/third out. The jumper executed a clean exit and proceeded to check his ripcords and his altimeter. The jumper displayed good altitude and air awareness. At 4500' AGL, the jumper broke off as briefed. At 4000' AGL, the jumper cleared his airspace and waved off. At 3500' AGL, the jumper pulled his main ripcord. The jumper noticed nothing unusual about the pull sequence, nor was his body position abnormal. After pulling the ripcord, the jumper's body position was in a head up attitude, where he noticed a bag lock. He tugged down twice vigorously on the risers. The main canopy did not deploy. The jumper immediately performed the cutaway sequence for a partial malfunction. The reserve canopy properly deployed. The jumper put "eyes-on" the cut main parachute in an attempt to mark its location for retrieval. The jumper marked the location before entering the pattern for the drop zone. The jumper entered the pattern and landed uneventfully, with the rest of the stick landing close to him. After this jump, the jumper and another individual tried to locate the parachute but they could not find it. After the all jumps were completed, everyone (20 jumpers) combed the woods in an effort to find the main parachute, to no avail.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Bag Lock (we could not locate the main parachute).

CONTINUED ON NEXT PAGE

ANALYSIS: 1

WHAT WAS THE MALFUNCTION?

Bag Lock.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Locking stows too long.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pack and inspect the MC-4 IAW with the TM. The locking stows should be 1 inch (inside of stow loop to rubber band.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 14,000	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 480 Feet	12. SURFACE WINDS (Knots) 17 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4 RAPS/CE/O2		16. JUMPER'S POSITION IN ACFT 2nd/12th	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 18
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Floating Ripcord	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>After exiting the aircraft at 14,000ft AGL, jumper continued with dive as planned. At 4,000 ft, pull altitude, jumper noticed a floating ripcord and missed it. He attempted to pull a second time, but unsuccessful. Jumper performed cutaway procedures and he was under a good reserve canopy by 2,200ft. Jumper landed safe on designated drop zone.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>After a 100% inspection of the MC-4 RAPS, no deficiencies were found on the equipment. Jumper experienced a floating main ripcord and failed to identify it prior to designated pull altitude. Jumper attempted to pull his main ripcord twice unsuccessfully, then he followed proper cutaway procedures. Jumper landed safely on designated drop zone.</p>

CONTINUED ON NEXT PAGE

ANALYSIS: 2

WHAT WAS THE MALFUNCTION?

Floating ripcord.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Failed to identify the problem prior to pull altitude.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper floating ripcord procedures are followed.
2. Identify floating ripcord problem before pull altitude.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 ft	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 480 feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Unknown		16. JUMPER'S POSITION IN ACFT
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 14,000 Feet AGL, jumper continued with dive as planned.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After a 100 percent inspection of the

CONTINUED ON NEXT PAGE

ANALYSIS: 3

WHAT WAS THE MALFUNCTION?

Incomplete information

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Gentex, Gloves, Goggles, Altimeter		16. JUMPER'S POSITION IN ACFT 3 pas/#1 jmp	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS FF 44
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Floating Ripcord	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper experienced a floating ripcord and was unable to locate it. Jumper was participating in a grouping exercise with two other jumpers. The jumpers exited together from the ramp of a C-17 at 12,500 feet AGL (12,480 feet MSL). At approximately 9,500 feet, the jumper who experienced the floating ripcord, bumped against the jumper on his right side and his goggles were knocked off his eyes. The jumper stated that he could not replace them over his eyes and stayed in formation until 4,500 feet. He then turned and tracked away until 3,700 feet where he began his deployment sequence. When he looked at his main ripcord grip to grab it, he did not find it seated in the pocket. After tracing his ripcord cable housing and still being unable to find it, he initiated cut away procedures for a total malfunction. During his cutaway procedures his FF2 fired and sent his main pilot parachute between his right and left risers. The main canopy began to deploy, but the jumper was able to grasp it and place it between his legs to prevent further deployment. The pilot parachute stayed between his risers and did not interfere with the suspension lines. The jumper landed his reserve canopy safely and without injury at the intended PI.

CONTINUED ON NEXT PAGE

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

A 100 percent TRI of both canopies and the harness was performed and no deficiencies were found. The MC4 was equipped with a serviceable FF2 mounted on the main parachute and was set to activate at 2,500 feet. The FF2 was chambered after the malfunction and was serviceable and functioning properly. It was determined after taking statements from and talking with the three jumpers and the jumpmaster, that the ripcord grip was most likely dislodged due to the impact at 9,500 feet with the fellow jumper on his right side. This was not confirmed by the other jumpers however, and the jumper failed to check his equipment after the collision. At 3,700 feet when he began his activation sequence, he could not locate his ripcord grip, and verbally stated that he could not locate his ripcord cable housing either, he eventually did locate the cable housing and traced it TWICE!! Still unable to locate his ripcord grip, the jumper stated that he initiated his cutaway sequence at 2,700 feet and was under a good canopy by 2,200 feet. The fact that the jumper was never able to re-seat his goggles over his eyes may have contributed to his inability to locate his ripcord grip or cable housing until he was too low.

ANALYSIS: 4**WHAT WAS THE MALFUNCTION?**

Floating ripcord.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Jumper bumped with another jumper.
2. Performed emergency procedures too late

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Jumper should keep proper spacing during grouping exercises.
2. If harness is not properly fit, the ripcord may be hard to grasp.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Feet/Miles) 5 Miles/Clear	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Rucksack, M1950		16. JUMPER'S POSITION IN ACFT 2nd/16th	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 1
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE X	Canopy damage	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
Suspension lines number 23,24,25,26 and 27 broken. Gore 1 had a 10 1/2 inch tear, Gore 7 had a 9 1/2 inch tear, Gore 13 had a 5 1/4 tear in it and Gore 25 had a 11 1/2 inch tear in it. Gore 25 canopy and anti-inversion net had the majority of the damage to it. The anti-inversion net had excessive damage throughout and Kiwi (shoe polish) was in various spots on the canopy and the anti-inversion net especially around the damaged area. The majority of the damage was caused to the left front riser suspension lines and anti-inversion net. The jumper was not observed to be falling faster than fellow jumpers, but the jumper did activate the MIRPS and it performed as designed.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
A 100% TRI was conducted on the parachute and no abnormalities were found that would indicate damage prior to the deployment sequence. The jumper had a weak exit and hit the lead edge of the door as he was exiting. The weak exit caused the jumper's body position to be incorrect which caused the jumper to be in a spinning motion by his 2000 count (2 second). It is believed that the jumper's feet momentarily got caught in the anti-inversion net causing undue stress to the left front riser suspension lines. Once the suspension lines broke the stress was transferred to the canopy and caused it to rip. The risers, deployment bag and pack tray had no damage to them. The jumper's equipment was inspected and noting unusual was noted that might have caused any of the damage to the parachute.

CONTINUED ON NEXT PAGE

ANALYSIS: 5

WHAT WAS THE MALFUNCTION?

Jumper interaction with another jumper from the opposite door.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Jumper interaction with a jumper from opposite door.
2. Upon exit, jumper's parachute collided with jumper from opposite door.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Jump only one door.
2. Reinforce mock door training.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 212	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 110 KIAS	11. DZ ELEVATION (Feet) 490 MSL	12. SURFACE WINDS (Knots) 0-8	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None	16. JUMPER'S POSITION IN ACFT 1st/1st	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Hung Slider
19. NO. JUMPS 5				
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)	
<p>Exited at 12,500 feet AGL. Normal free fall. Open at 4,000 FT AGL looked up and saw he have a hung slider pumped brakes two-three times, and performed cutaway and landed safely on DZ.</p>	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)	
<p>SM exited at 12,500 Ft AGL opened at around 4,000 Ft AGL saw he had a hung slider. Jumper pumped his brakes but failed to do a canopy control check. Upon doing a 100% TRI, the slider was down and no damage to the main canopy was seen. Cause of the malfunction was lack of jumper to follow proper procedures.</p>	

CONTINUED ON NEXT PAGE

ANALYSIS: 6

WHAT WAS THE MALFUNCTION?

Hung Slider

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Tension knot or line twist.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pack and inspect IAW TM 281-23&P.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) 3-5	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Ruck (35 Lb) LCE, M4, M1950, NVG, B-7		16. JUMPER'S POSITION IN ACFT 20th, 2nd Pass
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS 8
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
20. TYPE OF RESERVE MIRPS		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO	22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)	
<p>The jump was a Company assault, night, with combat equipment from C-130 aircraft. This was the jumpers first jump in the Bn. Jumper stated after exiting he checked his canopy and saw a semi-inversion. He thought he was falling faster than his fellow jumpers and pulled his reserve. The pilot parachute deployed and inflated but did not completely deploy the MIRPS. An inspection of both canopies revealed no damage. Two experienced jumpers (including the Assistant Malfunctions NCO) witnessed the jumper descending with his MIRPS Pilot Chute trailing him. Both jumper stated that the jumper had a good canopy and they did not believe he was falling faster than his fellow jumpers.</p>	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)	
<p>I do not believe that the jumper had a malfunction. The rate of descent was also too slow for the MIRPS pilot parachute to overcome the weight of the canopy.</p>	

<p>CONTINUED ON NEXT PAGE</p>

ANALYSIS: 7

WHAT WAS THE MALFUNCTION?

Jumper thought he was falling too fast. However, the jumper had a good canopy and there was not a malfunction..

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper inexperience.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Jumper training.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800	10. ACFT SPEED (Knots) 125	11. DZ ELEVATION (Feet) 1400	12. SURFACE WINDS (Knots) 3-5	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Kevlar, LBV, Ruck, M1950		16. JUMPER'S POSITION IN ACFT 21/R door
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS 25
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
20. TYPE OF RESERVE MIRPS		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Leg
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper exited the right door of the 141 and immediately collided with another jumper from the left door. The jumper from the left door became entangled in the right jumpers suspension lines. The lower jumper heard and felt a snap and immediately fell away from the entangled jumper. He activated his reserve parachute and immediately landed. The jumper recovered his equipment and continued on his mission. The malfunction was not identified until 0600 the following morning when the parachutes were being recovered. Upon inspection of the parachute the following damage was noted: Lines 1 - 14, broken/burnt 136 inches from connector links. Line 15, 21, 23, 27 and 28 were damaged/burnt. Both jumpers equipment was inspected with no noticeable damage, burns, cuts not abnormal marks. The deployment bags from the right door were inspected with no abnormalities found.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) With the lapse in time between the incident and the investigation (5 days), most of the evidence was lost. The jumpers suspension lines became entangled with the other jumpers equipment during elongation/deployment causing them to break. The parachute is being sent to Natick for further investigation/review.				

CONTINUED ON NEXT PAGE

ANALYSIS: 8

WHAT WAS THE MALFUNCTION?

Jumper interaction with another jumper from the opposite door.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper exiting from both doors at the same time.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Jump only one door at a time.

NOTE: All jumpers should report malfunctions ASAP to malfunction officer in accordance with AR 59-4.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 240	12. SURFACE WINDS (Knots) 7 Knots	13. VISIBILITY (Feet/Miles) 6 Miles/Clear	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ACFT 11th/12th	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 2
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Net Lock	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)	
<p>The canopy was inspected and burns were found on gores 19, 20, 21 and 22 section 5. Gores 9, 23, and 24 had holes in the apex and gores 14 and 25 section 4 had unknown stains on it. A piece of barbed wire approximately 2 3/4 inches long was caught in the anti-inversion net. The jumper was observed to be falling faster than his fellow jumpers.</p>	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)	
<p>A 100% TRI was conducted on the parachute and the only abnormalities found were the ones stated in block 30. During the investigation of the parachute it appears that the piece of barbed wire was caught on the anti-inversion net and the packer missed it. Upon the deployment of the parachute the barbed wire caused the net to bunch up which caused net lock. The air was not able to go up the air channel to fully inflate the parachute. The jumper pulled his reserve and it performed as designed and the jumper landed safely. The jumper sustained no injuries.</p>	

<p>CONTINUED ON NEXT PAGE</p>

ANALYSIS: 9

WHAT WAS THE MALFUNCTION?

The canopy did not deploy beyond the long fold because the net was entangled with the net.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Barbed wire was found in the net

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Reinforce correct packing and inspection procedures.
2. Shake out all parachutes.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT UH-1H	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 AGL	10. ACFT SPEED (Knots) 70 Knots	11. DZ ELEVATION (Feet) 115 Feet	12. SURFACE WINDS (Knots) 0 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ACFT 1	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 7
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Misrouted control line	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

THE JUMPER WENT TO HIS SECOND POINT OF PERFORMANCE AND WHEN HE CHECKED CANOPY TO GAIN CANOPY CONTROL HE OBSERVED THAT THE CONTROL LINE WAS ENTANGLED WITH THE SUSPENSION LINES. THE JUMPER TRIED TO PULL THE TOGGLE AND IT DID NOT RESPONDED. HE THEN WENT TO A TIGHT BODY POSITION AND ACTIVATED HIS RESERVE. WHEN THE MALFUNCTIONS NCO ARRIVED AT THE SIGHT, THE SOLDIER HAD RELEASE THE RISER. THE PARACHUTE WAS SEGREGATED FROM THE OTHER PARACHUTES FOR FURTHER INSPECTION. WHEN THE UNIT RETURNED TO THE SHOP, THE MALFUNCTIONS NCO INSPECTED THE PARACHUTE. THE FOUR LINE CHECK WAS CLEAR; THEN THE MALFUNCTIONS NCO PROCEEDED TO PERFORM A LINE COUNTINUITY CHECK. WHEN THE CONTROL LINES WERE CHECKED I FOUND THAT THE LEFT CONTROL LINE WAS MISROUTED AROUND LINE 9 TO LINE 14.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

THE MAIN PARACHUTE HAD FULL LIFT AND THE RESERVE DID NOT INFLATE

CONTINUED ON NEXT PAGE

ANALYSIS: 10

WHAT WAS THE MALFUNCTION?

The control line was misrouted

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The parachute control line was not properly routed when it was put into service or following maintenance.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure control lines are in proper sequence when the parachute is placed into service.
2. Submit a DA 2028 to include a control line check following the four line check.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 120 Knots	11. DZ ELEVATION (Feet) 400 Feet	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) 0-10 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER B-7 Flotation Device, BDUs, MC1-1C		16. JUMPER'S POSITION IN ACFT 1/4	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 7
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken Control Line	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
The left control line was separated from the canopy upon opening. When the jumper looked up to check canopy he observed a hole and felt that he was falling faster than his fellow jumpers and at that time he deployed his reserve.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
Initial Opening Shock popped the left control line, which caused damage (hole) to the canopy.

CONTINUED ON NEXT PAGE

ANALYSIS: 11

WHAT WAS THE MALFUNCTION?

Broken control line.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Twisted control line.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure control line is not twisted. Pack and inspect IAW the TM.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 120	11. DZ ELEVATION (Feet) 400	12. SURFACE WINDS (Knots) 2-5 Knots	13. VISIBILITY (Feet/Miles) 0-10 Miles
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER BDUs, B-7 floatation device		16. JUMPER'S POSITION IN ACFT UNK
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
19. NO. JUMPS				
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) THERE WERE THREE (3) RESERVE ACCIDENTAL ACTIVATIONS ON THE DROPZONE. (1) THE JUMPMaster ACCIDENTLY PULLED THE RIPCORD DURING JMPI PROCEDURES. THERE WERE TWO SOLDIERS THAT ACCIDENTLY PULLED RIPCORD AS THEY WERE RECOVERING THEIR PARACHUTES ON THE DROPZONE.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) JUMPERS WERE NOT AWARE OF WHAT THEY WERE DOING. THEY SHOULD HAVE BEEN MORE CAREFUL OF WHAT WAS GOING ON.				

CONTINUED ON NEXT PAGE

ANALYSIS: 12

WHAT WAS THE MALFUNCTION?

Three each reserve parachutes accidentally activated.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper handling of equipment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Expand the instructions in AR 59-4 to narrow the definition of an incident.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 120	11. DZ ELEVATION (Feet) 400	12. SURFACE WINDS (Knots) 2-5 Knots	13. VISIBILITY (Feet/Miles) 0-10 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER BDUs, B-7 Flotation Device		16. JUMPER'S POSITION IN ACFT	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 6
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

TWO (2) JUMPERS EXITED THE AIRCRAFT. ONCE THE JUMPERS WERE UNDER CANOPY THEY DRIFTED TOWARDS EACH OTHER. AT THAT TIME THE SUSPENSION LINE FROM ONE JUMPERS PARACHUTE GOT TANGLED IN THE OTHER JUMPERS RIPCORD, AS THE JUMPERS SEPARATED THE RIPCORD WAS PULLED BY THE SUSPENSION LINES.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

JUMPERS DIDN'T STAY THE PROPER DISTANCE FROM EACH OTHER.

CONTINUED ON NEXT PAGE

ANALYSIS: 13

WHAT WAS THE MALFUNCTION?

Incident - Mid-air entanglement with premature activation of the MIRPS.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Failure to maintain separation.
2. Did not follow proper rules of the air.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Retrain of five points of performance during sustained airborne training.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT UH-1H	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 AGL	10. ACFT SPEED (Knots) 50 Knots	11. DZ ELEVATION (Feet) 214	12. SURFACE WINDS (Knots) 6-9 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ACFT Lift 6 PO 4	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 25
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Accidental activation of reserve	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) MIRPS ACTIVATED UPON IMPACT WITH GROUND	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) JUMPER WAS IN PROPER POSITION PREPARED TO LAND. UPON IMPACT THE BUTTON ON HIS SLEEVE CAUGHT THE RIP CORD GRIP AND ACTIVATED THE MIRPS. JUMPER SAID HE "BARELY TOUCHED THE RIP CORD GRIP."	

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ANALYSIS: 14

WHAT WAS THE MALFUNCTION?

Incident - MIRPS deployed on the ground after soldier landed. Claimed button on sleeve accidentally deployed reserve.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Soldier accidentally reached for MIRPS and grabbed the ripcord grip instead of the carrying handle.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Retrain and emphasize during sustained airborne training the recovery of equipment.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-182	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 8,000 ft AGL	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 118 Feet MSL	12. SURFACE WINDS (Knots) 6 Knots	13. VISIBILITY (Feet/Miles) Unrestricted
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER B-22Z, Slick		16. JUMPER'S POSITION IN ACFT Solo
17. TYPE PARACHUTE (Specify) B-22Z	18. TYPE MALFUNCTION			19. NO. JUMPS 93
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Line Over w/ Burn Holes
20. TYPE OF RESERVE Aerostar 28 Foot	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Line over malfunction with several burn holes in the canopy.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Undetermined. Jumper was in a good deployment attitude. The parachute had been rigged in accordance with the systems' Technical Order.				

CONTINUED ON NEXT PAGE

ANALYSIS: 15

WHAT WAS THE MALFUNCTION?

Line over canopy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

This type of canopy during deployment breathes or flutters which caused a line to be sucked over and routed over canopy.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not to be used a routine jumping parachute.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-182	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 8,000 AGL	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 118	12. SURFACE WINDS (Knots) 6Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Non-standard/video camera		16. JUMPER'S POSITION IN ACFT Jumpmaster	
17. TYPE PARACHUTE (Specify) Non-Standard	18. TYPE MALFUNCTION				19. NO. JUMPS 2000
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Line Over	
20. TYPE OF RESERVE Non-Standard	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The parachutist was conducting MFF upgrade training. He exited from 8000 feet AGL, fell to his deployment altitude of 3000 feet and deployed his main parachute. During "Check Canopy" he noticed he had a line over. He then checked his altitude and executed his emergency procedures. The parachutist then landed his reserve parachute on the dropzone without incident.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Unknown</p>

CONTINUED ON NEXT PAGE

ANALYSIS: 16

WHAT WAS THE MALFUNCTION?

Line over canopy on non-standard parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper packing techniques.
2. Possible speed packing.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Adhere to proper instructions of packing given by manufacturer. IP procedures.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-182	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 5,000 AGL	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 118	12. SURFACE WINDS (Knots) 3-10 Knots	13. VISIBILITY (Feet/Miles) 5000 (scat)	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER B-22Z, ML4 Survival kit		16. JUMPER'S POSITION IN ACFT Solo	
17. TYPE PARACHUTE (Specify) B-22Z	18. TYPE MALFUNCTION				19. NO. JUMPS 85
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Hols, 2 broken lines	
20. TYPE OF RESERVE Aerostar 28 Foot	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The parachutist was participating in MFF upgrade training. He exited from 5000 feet AGL and fell to his deployment altitude of 4000 feet then deployed his main parachute. During, "Check Canopy", he noticed he had a total inversion, holes, and two broken suspension lines. He exercised good judgement, deployed his kit, and did not jettison his four line modification.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Unknown					

CONTINUED ON NEXT PAGE

ANALYSIS: 17

WHAT WAS THE MALFUNCTION?

Total inversion, holes in canopy, and two broken suspension lines.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient information. Flutter of canopy.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not to be used as routine parachute.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT CH-53E	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 1500 AGL	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 200 Feet	12. SURFACE WINDS (Knots) 6-8 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Hollywood	16. JUMPER'S POSITION IN ACFT 5/3 Ramp		
17. TYPE PARACHUTE (Specify) MC1-1B	18. TYPE MALFUNCTION				19. NO. JUMPS 20
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Jumper Error	
20. TYPE OF RESERVE T-10	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>SNM WAS AIRLIFTED TO HOSPITAL COMPLAINING OF BACK, BUTTOCKS, AND LEFT LEG PAIN. SNM ALSO HAD A CUT ON LEFT HAND THAT WAS BLEEDING. ALL TESTS AND X-RAYS HAVE COME BACK NEGATIVE.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>JUMPER WAS RUNNING WITH THE WIND WHEN HE LANDED. HE NEVER ATTEMPTED TO TURN AND HOLD WHILE PREPARING TO LAND. JUMPER ERROR..</p>

CONTINUED ON NEXT PAGE

ANALYSIS: 18

WHAT WAS THE MALFUNCTION?

Incident - Running with the wind. Did not turn and hold before landing.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Lack of experience.
2. Failed to follow points of performance and prepare to land attitude.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure soldier receives proper training in respect to steerable parachutes.
2. Retrain sustained airborne training.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 217	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 9,500	10. ACFT SPEED (Knots) 110	11. DZ ELEVATION (Feet) 490 MSL	12. SURFACE WINDS (Knots) 5	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC4/O2/Weapon/Rucksack		16. JUMPER'S POSITION IN ACFT Number 1 Door	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 79
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	AR2 Activation	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper exited aircraft at 9,500 feet. Normal freefall at 8,500 feet. The AR2 fired deploying his reserve parachute.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The AR2 was in the OFF position when JMPI occurred and the loading of the aircraft occurred. Possibility being that while on the aircraft in all of the equipment spotting and moving around while climbing to altitude the jump off switch was turned to the jump position. Upon exit and reaching the 80 feet per second the AR2 fired.					

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ANALYSIS: 19

WHAT WAS THE MALFUNCTION?

Misfire of AR2.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Soldier did not recycle the AR2 (J/M student).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper procedures are followed.
2. Ensure proper space for separation is maintained.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 feet AGL	10. ACFT SPEED (Knots) 130 knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER ICRAP		16. JUMPER'S POSITION IN ACFT	
17. TYPE PARACHUTE (Specify) SF-210	18. TYPE MALFUNCTION				19. NO. JUMPS 1000
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag lock	
20. TYPE OF RESERVE Raven II-M	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>After exiting the aircraft at 12,500 feet AGL, jumper continued with dive as planned. Jumper pulled his main pilot parachute at 600 feet AGL and had a hard opening and was spinning very violently to the right. Jumper tried three times to pull the right toggle but could not unstow it. Jumper performed cutaway procedures.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>After a 100 percent TRI, I found the left toggle was misrigged causing it to lock. The malfunction was due to improper packing of the toggle to the fingertrapped loop.</p>

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ANALYSIS: 20

WHAT WAS THE MALFUNCTION?

Bag Lock.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper packing.
2. Left toggle caused bag to lock.
3. Overstowing of toggle.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Tacking down finger trap if toggle fits through.
2. Ensure that toggle is not placed too far into fingertrap.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1,000 AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 168 MSL	12. SURFACE WINDS (Knots) 220/05	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Rucksack, weapon, K-pot		16. JUMPER'S POSITION IN ACFT 5 of 6	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 65
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken Control Line Bridle	
20. TYPE OF RESERVE 24 Foot Troop Reserve Parachute	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper exited aircraft (ramp/left cable) and experienced harder than normal opening shock. When jumper checked canopy he noticed it was distorted. Jumper grabbed his steering toggles and noticed his left control line was not attached to the canopy. Jumper attempted to make turns using rear risers with minimal success. Jumper used front and back risers on right side and had some turning capability before lowering rucksack and impacting the ground. Jumper made a safe landing facing 90 degrees to the wind line. No damage to equipment.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Harder than normal opening shock caused the Control Line Bridle to tear away from stitching at connection to gore #6. Post malfunction inspection performed by myself and 3 system qualified Air Force riggers.					

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ANALYSIS: 21

WHAT WAS THE MALFUNCTION?

Broken control line.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Control line could have been a little short.
2. Packer error.
3. Control line not properly stitched to canopy.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

During inspection and packing procedures, dress the canopy and make sure control line is the proper length. Also the risers should remain flat. (tension applied)

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet	10. ACFT SPEED (Knots) Unknown	11. DZ ELEVATION (Feet) 377 Feet	12. SURFACE WINDS (Knots) 3-5 Knots	13. VISIBILITY (Feet/Miles) Unknown	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Rucksack, LBE		16. JUMPER'S POSITION IN ACFT Unknown	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper's T-10C had no lift capability. He activated his MIRPS and landed safely with no injury. The malfunction NCO inspected his equipment and found the canopy release assembly was disconnected, the left connector snap on the MIRPS was not attached to the D-ring, and the canopies of both parachutes were fully opened on the ground (not tangled). The jumper was unaware of disconnecting the release assembly.	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Upon TRI, no damage was found on the canopy release assembly. The main canopy had a small (3/4 inch) hole in section 5 of gore #30. Connector strap on MIRPS was within tolerance.	

CONTINUED ON NEXT PAGE

ANALYSIS: 22**WHAT WAS THE MALFUNCTION?**

MIRPS left connector snap not connected to D-ring. Also, jumper states that one canopy release assembly was not connected.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Connector snap could have been unhooked by jumper during inflight. During JMPI, the J/M could have accidentally unsnapped the hook when checking for proper tension.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Malfunction NCO training. Not enough information on report.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 238 Feet MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 1900 Feet/6 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER M-1950, Alice Pack, Helmet, LCE		16. JUMPER'S POSITION IN ACFT Jmp 8/L Door	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 17
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Streamer	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

First pass, jumper number 8 on the left door experienced a total malfunction with no lift capability to the jumper. At approximately 200 feet AGL the jumper successfully activated his reserve and landed without injury. From the time the MIRPS fully deployed to the time he landed was no more than 2 seconds. Upon arrival, the jumper's main canopy was found in a normal deployed configuration. The lower lateral band was not entangled with the anti-inversion net. There was no debris found in the anti-inversion net, inside the canopy, or on the landing site. The jumper stated that he exited the aircraft, counted to 4, and felt no opening shock. He then activated his reserve parachute. Both parachute systems received a 100% TRI. The MIRPS was found to have zero deficiencies. The T10-C system had only one small deficiency. Section 5, Gore 19 had slight separation from the radial seam measuring 2 inches in length. The repair would require a sewn patch with a small channel wrap. The damaged area did not in any way cause the malfunction. The deployment bag was recovered and deemed serviceable.

CONTINUED ON NEXT PAGE

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After completing a 100% TRI of the T-10C parachute there was no definite proof of what caused the malfunction. It is possible that during the deployment phase, a tension knot formed on its own in the anti-inversion net / lower lateral band area. Another possibility is that when the canopy was placed into the deployment bag, the anti-inversion net / lower lateral band was inadvertently positioned in a configuration that could have facilitated the formation of a tension knot during the deployment sequence. This could be caused by the anti-inversion net becoming entangled with the lower lateral band, one or more of the pocket bands, or a small portion of the canopy. However, when the MIRPS fully deployed, the main canopy relaxed, which allowed the tension knot to work itself free. Since there was no damage to the canopy or suspension lines, the information available does not validate either of these possibilities.

ANALYSIS: 23**WHAT WAS THE MALFUNCTION?**

Streamer. No lift capability.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

During packing, the anti-inversion net could have been routed over V-tab or pocket bands routed back into net causing it to stay closed at the lower lateral band.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Proper dressing of net, internal SOPs for additional check of pocket bands.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT H-60	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 6000 Feet AGL	10. ACFT SPEED (Knots) 70 Knots	11. DZ ELEVATION (Feet) SL - 0	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Clear	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Wetsuit and water survival equipment		16. JUMPER'S POSITION IN ACFT Last	
17. TYPE PARACHUTE (Specify) MT-1X	18. TYPE MALFUNCTION				19. NO. JUMPS 200
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
20. TYPE OF RESERVE X		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Malfunction involved a partially deployed main with multiple tension knots. Equipment checks and emergency procedures were accomplished, safetyman checks were completed. Jumper was the jumpmaster for this deployment and was the last to exit the aircraft. Jumper deployed aircraft at 6000ft, with a 2-second delay between jumpers, pulling 5 seconds after deployment. This was a planned water deployment to calm waters. Jumpers were not equipped with altimeters; no additional equipment was worn beyond normal water safety equipment. Jumper deployed the aircraft stable and deployed main parachute 5 seconds after deployment. Jumper states the canopy was slow to deploy and never fully opened. Jumper stated parachute appeared to be severely twisted placing him into a spinning motion. Jumper attempted to bicycle out while spreading canopy risers. Jumper then visualized multiple knots and entanglements. Jumper initiated cutaway procedures and safely landed under reserve canopy. Ground personnel stated canopy partially deployed and lines appeared to be over the canopy.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Canopy was recovered but was damaged by a civilian boater who in his attempt to assist ran over the parachute with a jet ski pulling the canopy into the jet drive. This caused additional damage to the canopy when it was cut from the impellers. Cause of the malfunction is unknown. Canopy was delivered to survival equipment shop for inspection.

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ANALYSIS: 24

WHAT WAS THE MALFUNCTION?

Partially deployed main with multiple tension knots.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient evidence. Possible packing error.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

(Packing Process) Need more information (Age life of canopy, number of jumps, water jumps, etc.)

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 10,000 AGL	10. ACFT SPEED (Knots) Unknown	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unrestricted
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ACFT
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	D-bag lock/ Severe line twists
19. NO. JUMPS				
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper initiated main canopy deployment procedures at 3,500 feet AGL, but the main parachute failed to deploy due to D-bag lock. The jumper performed proper E.P.s by pulling down twice on the rear risers, but the canopy still failed to deploy. He then began to initiate cutaway procedures when the main canopy finally deployed at approximately 2700 feet AGL. Although the cells were inflated, there was what appeared to be severe line twists with a slow right-hand turn. He attempted to correct the line twists by spreading the risers and bicycling his feet. After several seconds, the twisted lines were not corrected and canopy was uncontrollable. At approximately 2100 feet AGL the jumper initiated the cutaway procedures. The Reserve canopy deployed without incident.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Suspect the severe line twists were induced by the D-bag lock. Still not known what caused the D-bag lock. Investigation is still underway and Main canopy has yet to be retrieved and inspected.				

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ANALYSIS: 25

WHAT WAS THE MALFUNCTION?

Main bag lock. Twisted lines.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improvement of packing.
2. Suspension line stows too long.
- 3, Lines twisted due to airflow.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper pack procedures are followed.
2. Ensure quality checks are made on bag closing and line stowing.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 12,500 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 87 Feet MSL	12. SURFACE WINDS (Knots) 4-6 Knots	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Slick		16. JUMPER'S POSITION IN ACFT Three way group exit/ one pass
17. TYPE PARACHUTE (Specify) MT1-X/S	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Pilot chute hesitation/ Broken line
19. NO. JUMPS S/L-30 F/F-68				
20. TYPE OF RESERVE MT1-X/S	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 AT ASSIGNED ALTITUDE, JUMPER LOCATED AND PULLED MAIN RIPCORD. JUMPER EXPERIENCED A BURBLE AND CLEARED IT ON FIRST ATTEMPT. UPON MAIN CANOPY DEPLOYMENT, JUMPER NOTICED ONLY THE LEFT SIDE WAS INFLATED CREATING A HARD RIGHT TURN. JUMPER PUMPED BRAKES IN AN ATTEMPT TO INFLATE CANOPY. JUMPER MANAGED TO INFLATE ALL BUT TWO RIGHT CELLS. STILL IN A HARD RIGHT HAND TURN, JUMPER ATTEMPTED TO CORRECT SPIN BY PULLING LEFT REAR RISER WITH NO RESULTS. AT 2000 FEET AGL, JUMPER PERFORMED CUTAWAY PROCEDURES AND LANDED ON DROP ZONE W/O INCIDENT. POST RECOVERY EQUIPMENT INSPECTION REVEALED THREE BROKEN LINES. ALL THREE BROKEN LINES WERE THE RIGHT FRONT A AND B LINES.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

SEAL TEAM FIVE RIGGERS INSPECTED THE PARACHUTE AND DETERMINED THE CAUSE OF MALFUNCTION FOR THE BURBLE APPEARS TO BE WEAK PILOT CHUTE SPRING. PILOT CHUTE USED ON MALFUNCTIONING PARACHUTE WAS MANUFACTURED (DOM) 5/89 AND PLACED IN SERVICE (PIS) 2/95. PILOT CHUTE DID NOT CONTAIN THE LARGE DIAMETER SPRING. RECOMMEND REMOVING FROM SERVICE ALL PILOT CHUTES MANUFACTURED BEFORE 1991 REGARDLESS OF THE AMOUNT OF SERVICE LIFE LEFT ON THEM. THE CAUSE OF THE BROKEN A/B LINES IS UNKNOWN. MEMBER PACKED PARACHUTE USING PROCEDURES AS OUTLINED IN NAVAIR 13-1-21 (1SEP87). EQUIPMENT WAS BORROWED FROM SEAL TEAM FIVE SAN DIEGO, CA.

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ANALYSIS: 26

WHAT WAS THE MALFUNCTION?

Burble - Three lines were broken causing a partial inflation of canopy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Possible weak pilot parachute.
2. Service life of parachute causing lines to break.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Check age of life of canopies.
2. Ensure correct pilot parachutes are utilized.
3. Remove all pilot parachutes manufactured before 1991.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 212	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 12,500 Feet AGL	10. ACFT SPEED (Knots) 110 Knots	11. DZ ELEVATION (Feet) 490 feet MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER AR2/Altimeter MC4 Parachute		16. JUMPER'S POSITION IN ACFT 2nd Pass/2nd Jumper	
17. TYPE PARACHUTE (Specify) MC4	18. TYPE MALFUNCTION				19. NO. JUMPS 104
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	AR2 Firing	
20. TYPE OF RESERVE MC4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 feet AGL, jumper continued with dive as planned. Jumper pulled his main ripcord at 4,000 feet AGL, and was under his main parachute at 3,400 feet AGL. The jumper noticed his reserve pilot parachute in trail and the reserve was deploying. Jumper decided to perform cutaway procedures. Jumper landed on the DZ without incident.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After performing a 100 percent inspection on the MC4 parachute system, the slider on the main parachute was found to be in the up position. Upon further investigation, the AR2 was set at 2,000 feet MSL on the altitude dial. The AR2 was removed from the system and tested IAW TM 10-1670-305-23&P and no deficiencies were found. The cause of this situation was the possibility of a hung slider and a fast rate of speed.

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ANALYSIS: 27

WHAT WAS THE MALFUNCTION?

Activation of AR2.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Low pull (student jumper), snivel, slow opening, porosity.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pull at correct altitude. For students, change pull altimeter from 4000 AGL to 4500 AGL-MSL.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 12,500 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER AR2/Altimeter MA 2-30/02 System MC4 Parachute System		16. JUMPER'S POSITION IN ACFT 2nd Pass/4th Jumper	
17. TYPE PARACHUTE (Specify) MC4	18. TYPE MALFUNCTION				19. NO. JUMPS 7th
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	AR2 Firing	
20. TYPE OF RESERVE MC4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 feet AGL, jumper continued with dive as planned. Jumper pulled his main ripcord at 4,000 feet AGL, and was under his main parachute at 3,500 feet AGL. The jumper noticed his reserve pilot parachute in trail and the reserve was deploying. Jumper decided to perform cutaway procedures. Jumper landed on the DZ without incident.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

A 100 percent inspection was performed on the MC4 parachute system and no deficiency was found. The AR2 (Automatic Activation Device) was set at 2,000 feet MSL on the altitude dial and was found to be actuated. The AR2 was removed from the system and tested IAW TM 10-1670-305-23&P and no deficiencies were found. The instructor stated that the AR2 was armed well above the altitude dial setting. Cause of the AR2 firing - unknown.

CONTINUED ON NEXT PAGE

ANALYSIS: 28

WHAT WAS THE MALFUNCTION?

Activation of the AR2.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Low pull/snivel (student jumper), slow opening, porosity.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

For training, change pull altitude from 4000 to 4500. 4500 feet at MFF School

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT UH-60	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,000 Feet	10. ACFT SPEED (Knots) 90	11. DZ ELEVATION (Feet) 435	12. SURFACE WINDS (Knots) 12	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER C/E M16 A2 (rubber)		16. JUMPER'S POSITION IN ACFT 4th/1st pass	
17. TYPE PARACHUTE (Specify) MC-5 S/L	18. TYPE MALFUNCTION				19. NO. JUMPS 61
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Flipped through risers	
20. TYPE OF RESERVE MC-5	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

It was the jumpers 12th MC-5 S/L jump. Jumper stated on the signal to go he exited the aircraft and his rifle dug on the deck causing him to have a bad exit. The jumper flipped through his risers causing the suspension lines to wrap around his rifle, body and packtray. Jumper was able to clear the lines from his weapon and body but not the packtray causing the left side of his canopy not to inflate and the jumper went into a violent righthand spin. After the jumper determined the canopy was uncontrollable, using proper procedures he cut his main canopy away and the reserve opened properly. Jumper was able to land on zone with no injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Poor exit procedures.

CONTINUED ON NEXT PAGE

ANALYSIS: 29

WHAT WAS THE MALFUNCTION?

Jumper flipped through risers.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad exit, due to improperly or poorly rigged equipment (weapon.)

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

USMC no longer jumps exposed weapons with the MC-5 S/L parachute. The USMC has developed a modified M-1950 weapons case to use with the MC-5. A different exiting body position should be tested.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT UH-60	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 10,000	10. ACFT SPEED (Knots) 90	11. DZ ELEVATION (Feet) 435	12. SURFACE WINDS (Knots) 12	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER CE M16A2 (rubber)		16. JUMPER'S POSITION IN ACFT 1/4th jumper
17. TYPE PARACHUTE (Specify) MC-5 S/L	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	flipped through risers
19. NO. JUMPS 28				
20. TYPE OF RESERVE MC-5	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

It was the jumpers 7th MC-5 S/L jump. Jumper stated upon exit he flipped through his risers and his harness shifted off his shoulder causing him to go into a spin. Jumper could not get harness back to proper position nor control the canopy and decides to cut away. Using proper procedures jumper cut away and his harness fixed itself and the reserve opened properly. Jumper and rest of stick landed off the DZ and were recovered safely with no injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Poor exit procedures

CONTINUED ON NEXT PAGE

ANALYSIS: 30

WHAT WAS THE MALFUNCTION?

Jumper flipped through his risers upon exit. Harness shifted off jumper's shoulder.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper body position upon exit.
2. Improper fit of the parachute harness.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Review exiting body position with MC-5 S/L parachute system.
2. Jumpmaster checks should ensure proper fit and wear of the parachute harness.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,000	10. ACFT SPEED (Knots) 125	11. DZ ELEVATION (Feet) 435	12. SURFACE WINDS (Knots) 10	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER CE 02		16. JUMPER'S POSITION IN ACFT 1st/2nd	
17. TYPE PARACHUTE (Specify) MC-5 S/L	18. TYPE MALFUNCTION				19. NO. JUMPS 111
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	jumper decided to cutaway	
20. TYPE OF RESERVE MC-5	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

It was the jumper's 12th MC-5 S/L jump. Jumper stated upon exit he had twists and after working them out his harness shifted off his right shoulder. Jumper could not get his harness back into place and decided to cut away using proper procedures, his harness fixed itself and the reserve opened properly. Jumper landed safely on the DZ with no injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Harness improperly fitted and shifted off shoulder. Jumper was not in a spin and had a good canopy.

CONTINUED ON NEXT PAGE

ANALYSIS: 31

WHAT WAS THE MALFUNCTION?

Parachute harness improperly fit to jumper and line twist upon opening.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Parachute harness assembly improperly fit.
2. Jumper inexperience could have contributed to the decision to cut away.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Jumpmaster check should ensure proper fit and wear of the parachute harness.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 13,000	10. ACFT SPEED (Knots)	11. DZ ELEVATION (Feet) 293	12. SURFACE WINDS (Knots) 6-12 Knots	13. VISIBILITY (Feet/Miles) Broken	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER FLIGHT SUIT AND MC-4		16. JUMPER'S POSITION IN ACFT FIRST /#SIX	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 110
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag Lock	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)	
NO DAMAGE WAS INCURRED ON THE PARACHUTE, IT WAS INSPECTED BY MYSELF AT THE SITE AND BACK AT HOME STATION. I NOTICED THE D-BAG TOOK A FEW SECONDS TO DEPOLY, THEN I NOTICED HIS RESERVE DEPLOYING AND JUMPER LANDING SAFELY ON THE GROUND.	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)	
I WOULD SAY THAT THE PART WHERE THE LINES SPLIT GOT HUNG UP IN THE RETAINER BAND. THAT'S ALL I COULD SEE THAT WAS WRONG.	

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ANALYSIS: 32

WHAT WAS THE MALFUNCTION?

Bag lock

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper stowing of the locking stows. The bar tack where the lines cascade could have been what caused the lines and retainer band to lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Packing instructions in the TM is not clear. SF command is going to put in a 2028 reference locking stows and cascade tacks. Riggers should catch this deficiency on a rigger check.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT UH-1N	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 4,500 Feet AGL	10. ACFT SPEED (Knots) 65 KTS	11. DZ ELEVATION (Feet) 2309 MSL	12. SURFACE WINDS (Knots) 3 KTS	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Video Helmet		16. JUMPER'S POSITION IN ACFT First
17. TYPE PARACHUTE (Specify) PD 230 MAIN, TALON 2 HARNESS/CONTAINER	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Tension Knot
19. NO. JUMPS 103 S/L, 4055 F/F	20. TYPE OF RESERVE PD 193R		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
22. RESULTING INJURY				

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

JUMPER WAS INSTRUCTOR/EVALUATOR FOR PHASE ONE CANDIDATE PERFORMING EMERGENCY EGRESS PARACHUTE TRAINING WITH FIVE SECOND DELAY. FOLLOWING STUDENT PARACHUTE DEPLOYMENT, INSTRUCTOR PULLED RIPCORD FOR MAIN PARACHUTE. AFTER DEPLOYMENT OF MAIN PARACHUTE, INSTRUCTOR/JUMPER PERFORMED CANOPY CHECK AND FOUND TENSION KNOT ON RIGHT FRONT SUSPENSION LINE AT CASCADE FROM A TO B LINES. JUMPER MADE SEVERAL ATTEMPTS TO CLEAR TENSION KNOT BY PULLING DOWN AND RELEASING FRONT RISER OF AFFECTED LINE GROUP. ALL ATTEMPTS WERE UNSUCCESSFUL AND JUMPER DETERMINED THAT THE CANOPY WAS UNCONTROLLABLE. AT 2,000 FT AGL JUMPER EXECUTED CUT-AWAY PROCEDURES, DEPLOYED RESERVE, AND LANDED UNEVENTFULLY.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

EXACT CAUSE UNKNOWN, HOWEVER, MANY FACTORS CAN CONTRIBUTE TO FORMATION OF TENSION KNOTS (IMPROPER DEPLOYMENT SEQUENCE, LINE DUMP, SLOW OPENING, AND POOR BODY POSITION). VIDEO DEMONSTRATED THAT JUMPER BODY POSITION UPON DEPLOYMENT WAS CORRECT.

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ANALYSIS: 33

WHAT WAS THE MALFUNCTION?

Tension knot.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Weak retainer bands used to stow the suspension lines causing line dump.
2. Slopping packing.
3. Worn suspension lines.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure suspension lines are properly stowed.
2. Ensure good IT of equipment after use.
3. Ensure good rigger checks are followed.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet	10. ACFT SPEED (Knots)	11. DZ ELEVATION (Feet) 377 Feet	12. SURFACE WINDS (Knots) 3-5	13. VISIBILITY (Feet/Miles)
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE	16. JUMPER'S POSITION IN ACFT L10	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Upon exiting the aircraft, canopy did not inflate completely. Jumper stated that he noticed his canopy release assembly activated on opening shock. Jumper also stated he collided with another jumper's canopy. Soldier activated MIRPS and landed without injury.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

JM and jumper behind soldier stated that jumper had a bad exit causing him to come in contact with the trail edge of the door. We believe that contact with the door caused the left safety clip of the soldier's canopy release assembly to open. We do not believe that the soldier's canopy release assembly activated because photos show he had a partial canopy on the way down. Soldier exited late causing him to be directly above jumper from the opposite door. The lower jumper's canopy may have starved the jumper's canopy of air and delaying opening. When the jumper activated his MIRPS, his main canopy was never given the opportunity to inflate completely. Photos show two partial canopies all the way down. When the MF NCO arrived at the scene, the jumper had already recovered and bagged both canopies. Upon inspection of the canopies, it was found that both canopy release assemblies were activated. Neither the main nor MIRPS canopies were found to have any damage. Inexperience may have caused the jumper to believe his canopy assembly popped out. The reserve activated as prescribed and we believe that, if given the opportunity, the main canopy would have activated as prescribed. Therefore, we believe this is an incident rather than a malfunction.

CONTINUED ON NEXT PAGE

ANALYSIS: 34

WHAT WAS THE MALFUNCTION?

Unexplained activation of the canopy release assembly.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper came into contact with the trail edge of the aircraft door.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Emphasize a good exit during pre-jump training.

TAR&M/SA VOL II

I. GENERAL									
1. UNIT BEING AIRLIFTED		2. DEPARTURE AIRFIELD		3. DATE		4. TYPE ACFT C-130		5. ACFT SER NO.	
6. OPERATION/EXERCISE			7. DZ AND LOCATION			8. DATE AND TIME			
9. ACFT ALTITUDE (Feet) 1250		10. ACFT SPEED (Knots) 130 Knots		11. DZ ELEVATION (Feet) 240		12. SURFACE WINDS (Knots) 6 Knots		13. VISIBILITY (Feet/Miles) 5M/Cloudy	
II. PERSONNEL									
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT				15. EQUIPMENT WORN BY JUMPER Alice Pack, M1950 Weapons Case			16. JUMPER'S POSITION IN ACFT 9th/9th		
17. TYPE PARACHUTE (Specify) T-10C		18. TYPE MALFUNCTION						19. NO. JUMPS 1	
		SEMI-INVERSION		INVERSION		CIGARETTE ROLL			
		PILOT CHUTE		BLOWN SECTION		BROKEN SUSPENSION LINE		Delayed Opening	
20. TYPE OF RESERVE MIRPS		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO			22. RESULTING INJURY None				
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The canopy was inspected and no damage was found. The parachute failed to fully inflate upon opening. The parachute was partially inflated at the top and the net was temporary locked. Jumper fell approximately 400 to 450 feet before the parachute fully inflated.									
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) A 100% TRI was conducted on the parachute and no damage was found. The parachute was manufactured in 1991 and was under the contract number of 77745. The gores were folded and the lower lateral band was not properly aligned. It is believed that upon deployment of the parachute the uneven lower lateral band caused the anti-inversion net to become tangled on itself and the v-tabs which caused the net to lock temporarily. The parachute fully inflated once the net lock was released. The jumper did not pull his reserve and stated that he was not counting, felt a jerk, looked up and noticed twists and started to bicycle. The jumper landed with no injuries.									

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ANALYSIS: 35

WHAT WAS THE MALFUNCTION?

Main parachute delayed during opening.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

It was determined that the parachute lower lateral band was not properly aligned. This could have caused the anti-inversion net to lock on the V-tabs causing a delayed opening.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Perform 100 percent TRI on all T-10C's manufactured in 1991 with the contract number of 77745. Ensure proper packing procedures are followed when dressing the anti-inversion net.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1000 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1463 Feet	12. SURFACE WINDS (Knots) 0-3 Knots	13. VISIBILITY (Feet/Miles) 7 Miles +
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Alice Pack		16. JUMPER'S POSITION IN ACFT 1st Pass L/6
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Net Lock
20. TYPE OF RESERVE T-10R	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon exit jumper experienced partial inflation of main canopy, providing very limited lift capability. Jumper deployed reserve, after reserve became inflated the main canopy fully inflated resulting in two canopies.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Complete TRI of main canopy showed no visual signs of damage or improper packing procedures. The anti-inversion net showed probable signs of twists over gore sections 23 through 30 cause is unknown.				

CONTINUED ON NEXT PAGE

ANALYSIS: 36

WHAT WAS THE MALFUNCTION?

Anti-inversion net lock

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Undetermined - A complete TRI was performed on the canopy in question and no probable cause was determined.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Undetermined

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Twin Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 12,500	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 321 Feet	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) 10 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC\$ Hollywood		16. JUMPER'S POSITION IN ACFT 1&2/1st Pass	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 35&33
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	High Altitude Entanglement	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Two relatively inexperienced MFF jumpers were taking part in a HALO train-up. They were the first and second jumpers out of the aircraft. The jumpers opened too close to each other and collided. The canopies remained inflated but they were spinning to the right. The jumpers decided that they would ride them in together. The jumpers continued to spin until they made contact with some small pine trees on the DZ. Their falls were broken when their canopies were snagged by the trees. The canopies sustained only minor damage and the jumpers were not injured.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Both jumpers are recent graduates from the MFF School and are relatively inexperienced. The jumpers were briefed to "wave off" and clear their air space at 4,500ft and to open at 4,000ft. Observers on the ground stated that the two jumpers who were falling close together, failed to track away from each other and ran into each other on opening. The suspected cause of this malfunction would be failure on the part of the jumpers to maintain separation during the freefall, and failure to clear their air space prior to deployment. Reserve not used.

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ANALYSIS: 37

WHAT WAS THE MALFUNCTION?

High altitude entanglement.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Failure to clear jumpers air space before deploying main canopies.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Maintain proper distance from other jumpers while in freefall.
2. Clear jumper air space before deploying main parachute.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 312 feet MSL	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Feet/Miles) Unknown
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER BDU, LBE, Ballistic Helmet (hollywood)		16. JUMPER'S POSITION IN ACFT 1Pass,#21,LD
17. TYPE PARACHUTE (Specify) T-10C troop back parachute	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Jumper #21 Left Door flipped through his risers after an unstable exit. He failed to protect his ripcord grip. The ripcord grip became entangled with an item of equipment which resulted in the accidental activation of the MIRPS. The canopy snaked around the jumpers left set of risers with the pilot parachute in tow. The jumper then retrieved the pilot parachute and contained it with the rest of the canopy. Jumper landed underneath a fully functional main canopy and sustained no injury. Upon inspection of the Reserve system, the centering line was found detached from the pilot parachutes' type I low porosity material.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>This was not a malfunction, but an incident where poor body position and failure to properly protect the ripcord grip, contributed to the accidental activation of the MIRPS.</p>

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ANALYSIS: 38

WHAT WAS THE MALFUNCTION?

Accidental reserve activation

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper had a bad exit and failed to properly protect his ripcord grip.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure that jumpers remain in a good tight body position through out the entire deployment sequence and protects the ripcord handle.

TAR&M/SA VOL II

I. GENERAL									
1. UNIT BEING AIRLIFTED		2. DEPARTURE AIRFIELD		3. DATE		4. TYPE ACFT C-130		5. ACFT SER NO.	
6. OPERATION/EXERCISE			7. DZ AND LOCATION			8. DATE AND TIME			
9. ACFT ALTITUDE (Feet) 12,500		10. ACFT SPEED (Knots)		11. DZ ELEVATION (Feet)		12. SURFACE WINDS (Knots) 8 Knots		13. VISIBILITY (Feet/Miles)	
II. PERSONNEL									
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT				15. EQUIPMENT WORN BY JUMPER Rucksack			16. JUMPER'S POSITION IN ACFT		
17. TYPE PARACHUTE (Specify) MC-4		18. TYPE MALFUNCTION						19. NO. JUMPS	
		SEMI-INVERSION		INVERSION		CIGARETTE ROLL			
		PILOT CHUTE		BLOWN SECTION		BROKEN SUSPENSION LINE		Line over canopy	
20. TYPE OF RESERVE MC-4		21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None					
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper had cutaway. After inspecting parachute it appears it was a line over canopy that caused the malfunction. Jumper cutaway his main and deployed reserve and landed safely. Main parachute was recovered.									
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Not Given									

CONTINUED ON NEXT PAGE

ANALYSIS: 39

WHAT WAS THE MALFUNCTION?

Undetermined.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Undetermined.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Undetermined.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 Feet	10. ACFT SPEED (Knots) 135 Knots	11. DZ ELEVATION (Feet) 320 Feet	12. SURFACE WINDS (Knots) 0-5 Knots	13. VISIBILITY (Feet/Miles) 4 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, Rucksack, Weapons Case		16. JUMPER'S POSITION IN ACFT 3rd, Jumpmaster	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 38
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	partially opened canopy	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The problem was a late opening parachute. I saw the jumper exit the aircraft, through a set of binoculars, with a good body position. When he went into his second point of performance he realized he had a partially opened canopy. The jumper immediately activated his reserve and within a couple of seconds of reserve activation the jumper's main opened up completely. The reserve parachute did not inflate due to the fact the pilot parachute tangled itself with a couple of suspension lines from the main as the main chute opened up. Thus causing the lift capability of the pilot chute to be lost. The jumper landed safely with his main canopy and no injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

A complete TRI was done on the main parachute and the D-bag. There were no abnormalities found with any of the equipment and the cause of the problem is unknown.

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ANALYSIS: 40

WHAT WAS THE MALFUNCTION?

Partially opened main canopy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Complete TRI conducted on the main canopy and no apparent problems were noted.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Questions have arisen on the deployment of habits of the MIRPS parachute.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 12,500	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 490 MSL	12. SURFACE WINDS (Knots) 0-09	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4 System, FF2, MA-230		16. JUMPER'S POSITION IN ACFT 5th
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Missed main ripcord
19. NO. JUMPS				
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) After exiting the aircraft at 12,500 feet AGL, jumper continued with the dive as planned. At 4,000 feet AGL jumper missed main ripcord and swiped at the cable housing. Jumper performed cutaway and landed on DZ without incident.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 100% TRL was performed on the MC-4 System and no deficiency was found. Due to the jumper's lack of jumps, jumper missed the main ripcord and performed cutaway.				

CONTINUED ON NEXT PAGE

ANALYSIS: 41

WHAT WAS THE MALFUNCTION?

Jumper failed to locate main ripcord.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Not looking at the main ripcord before reaching for it.
2. Jumper inexperience.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

More training.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 212	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500	10. ACFT SPEED (Knots) 110	11. DZ ELEVATION (Feet) 490 MSL	12. SURFACE WINDS (Knots) 10-18	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4 System, FF2, MA-230	16. JUMPER'S POSITION IN ACFT 2nd	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION			19. NO. JUMPS 128
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Line over
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) After exiting the aircraft at 12,500 feet AGL, jumper continued with the dive as planned. At 4,000 feet AGL jumper pull main and after opening the canopy started a turn to the right. Jumper performed post-opening checks and cutaway and landed on DZ without incident.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 100% TRL was performed on the MC-4 System and no deficiency was found. The jumper canopy had the last two cells on the right side collapse causing the parachute to turn. Jumper performed cutaway and landed on DZ without incident.				

CONTINUED ON NEXT PAGE

ANALYSIS: 42

WHAT WAS THE MALFUNCTION?

Closed end cells.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Unknown.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Follow proper post opening procedures by pumping the toggles in attempt to fill the end cells with air.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet	10. ACFT SPEED (Knots)	11. DZ ELEVATION (Feet) 442 Feet	12. SURFACE WINDS (Knots) 3-5	13. VISIBILITY (Feet/Miles)
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE, Ruck, M1950		16. JUMPER'S POSITION IN ACFT
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumpmasters MIRPS prematurely activated inside the aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Primary jumpmaster gave all commands up to the one minute warning and was coming back from last clear to rear check when he came in contact with the trail edge of the door. We believe the contact with the door caused the MIRPS to activate.				

CONTINUED ON NEXT PAGE

ANALYSIS: 43**WHAT WAS THE MALFUNCTION?**

MIRPS premature activation.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Discuss several theories: Jumpmaster breaking at the elbow to come back into the aircraft. This could cause the handle to catch the door. Loose MIRPS handle stow pocket? Height of jumpmaster may be factor (over 6 foot).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Check MIRPS minimum pull weight.
2. Look at length of MIRPS ripcord.
3. Should the jumpmaster break one arm at the elbow to come back into the aircraft after locking out.

TAR&M/SA VOL II

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 4000	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 0 MSL	12. SURFACE WINDS (Knots) 210/10	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Fins and Dive Mask		16. JUMPER'S POSITION IN ACFT 1/2	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS Unknown
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Reserve canopy activation	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) While disconnecting RSL reserve canopy deployed.	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Accidental pulling of RSL while disconnecting Stevens system.	

CONTINUED ON NEXT PAGE

ANALYSIS: 44

WHAT WAS THE MALFUNCTION?

Unintended activation of MC-4 reserve.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper did not follow correct procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Follow correct packing and inspection procedures IAW TM.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 312 MSL	12. SURFACE WINDS (Knots) 0 Knots	13. VISIBILITY (Feet/Miles) Not Available
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE, ballistic helmet, alic pack	16. JUMPER'S POSITION IN ACFT L32, 3 Pass	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
				19. NO. JUMPS 60
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The malfunction NCO noticed a DAD falling from the sky, looked up to identify which jumper it came from. The malfunction NCO noticed that jumper #32 left door had accidentally deployed his reserve parachute. The reserve parachute never inflated. The jumper states that he exited the aircraft, counted to four, and checked his first 2 points of performance. The jumper then noticed that his reserve parachute had deployed, and was dangling approximately 6 feet in front of him. Cause of the deployment of the reserve was unknown.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This was not a Malfunction, but an incident. The Malfunction NCO did not gain control of the air items in question, therefore, the cause of the accidental deployment of the reserve was unknown. The only evidence we have is the jumper's statement.

CONTINUED ON NEXT PAGE

ANALYSIS: 45

WHAT WAS THE MALFUNCTION?

MIRPS premature activation.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

(Unknown) In theory could something such as a BDU sleeve button activate the MIRPS when the jumper transitions from tight body position to check canopy.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Establish a minimum pull weight for the reserve handle.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 312 Feet MSL	12. SURFACE WINDS (Knots) 0	13. VISIBILITY (Feet/Miles) Not Available
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, ballistic helmet, alic pack, M-16		16. JUMPER'S POSITION IN ACFT 3L, 1st Pass
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPEN- SION LINE	
19. NO. JUMPS 10				
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTION- ED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

I, the Malfunction NCO did not witness the incident, therefore, I cannot assess the incident. The following statement is taken from jumper #3, left door, 1st pass, he states that he had a good exit and had positive control of his ripord grip. When he went to check his first point of performance, his reserve parachute was in his face. He then tried to pull the canopy back into his body to prevent it from inflating. The jumper then landed. He felt that he may have been falling faster than the fellow jumpers. The reserve parachute did not inflate.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This is not a malfunction, but an incident. The malfunction NCO could not properly assess the cause of the accidental activation, due to fact that he did not witness the incident nor did he gain control of the air items in question. The only evidence we have is the jumpers statement. Due to the lack of substantial evidence, the cause of the accidental deployment of the reserve is unknown.

CONTINUED ON NEXT PAGE

ANALYSIS: 46

WHAT WAS THE MALFUNCTION?

Unknown

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Unknown

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

MIRPS activation research.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT HH-60	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,000 Feet AGL	10. ACFT SPEED (Knots) 80 Knots	11. DZ ELEVATION (Feet) 18 Feet MSL	12. SURFACE WINDS (Knots) 8 Knots Gusting 13	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER SLICK	16. JUMPER'S POSITION IN ACFT 5 of 5	
17. TYPE PARACHUTE (Specify) MT-1XS	18. TYPE MALFUNCTION			19. NO. JUMPS SL-330 FF-250
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag Lock
20. TYPE OF RESERVE MT-1XS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Bag Lock.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Improper packing.				

CONTINUED ON NEXT PAGE

ANALYSIS: 47

WHAT WAS THE MALFUNCTION?

Bag lock..

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper packing and inspection procedures. Ensure locking stows are 1 inch long. (Measure to inside of fold.)

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pack and inspect IAW the TM. Include more information on the report.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet	10. ACFT SPEED (Knots) Unknown	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) 6-8	13. VISIBILITY (Feet/Miles) Limited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE, ruck 8AW M1950		16. JUMPER'S POSITION IN ACFT Left 5th	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Upon exiting, the jumper's static line broke. When the parachute was located, the main was deployed with the D-bag still attached (properly) to the bridle loop. Both canopy release assemblies were disconnected. Possible static line misrouted between left riser assembly.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

An initial inspection of the air items was conducted. Soldier stated he felt a "light tug" on his main. After counting to four thousand, he said he had no lift capability. This was confirmed in conversation with his fellow jumpers. Jumper stated he "heard something flapping in the wind" and activated his MIRPS. Jumper claims he had a good exit but fell backwards after exiting. JM or safety was not available to interview. When questioned, the jumper did not know if his main deployed. Air items were recovered and left on DZ.

CONTINUED ON NEXT PAGE

ANALYSIS: 48

WHAT WAS THE MALFUNCTION?

Broken static line.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Misrouted static line.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Better static line checks by the jumpmaster and safety.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Twin Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 10,000 AGL	10. ACFT SPEED (Knots) 100 Knots	11. DZ ELEVATION (Feet) 0	12. SURFACE WINDS (Knots) 0-2	13. VISIBILITY (Feet/Miles) 5 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Gentex Helmet, rucksack, O2 and weapon		16. JUMPER'S POSITION IN ACFT #3/1st Pass	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 39
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Unstable Body Position	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

On the final jump of the level one train up, jumper #3 exited the aircraft at 10,000 feet AGL with a front mounted rucksack, O2 and weapon. After exiting the aircraft, the jumper became unstable, recovered, and unstable again. Upon gaining stability, the jumper began his deployment sequence at 5,000 feet AGL by waving off and clearing his air space. At 4,000 feet AGL, the jumper was unable to locate his main canopy release ripcord grip, which was blocked from view by the oxygen hose. After tracing the main canopy release ripcord cable housing, the jumper secured the ripcord grip and pulled. During the pull, he tucked his right elbow causing him to flip to the right and head down. While the main canopy was deploying, the suspension lines wrapped around and entangled with his left foot. The jumper immediately began emergency procedures for a partial malfunction. The jumper cutaway his main canopy and pulled his reserve ripcord grip. As the reserve was deploying the main canopy pilot parachute bridle line entangled with the "B" cascade lines of the reserve canopy. This caused the jumper to experience twists, which initially he was unable to clear. While attempting to clear the twists, the main canopy pilot parachute bridle line broke free from the "B" cascade line. However, now the main canopy pilot parachute and approximately 12 inches of the bridle line became entangled with the upper control lines of the reserve canopy. The jumper was able to control his canopy from this point and flew to the drop zone. He lowered his equipment and landed without injury with the main canopy wrapped around his left foot by the suspension lines, and the main canopy pilot parachute entangled in his reserve canopy upper control lines. Damaged was limited to a broken main canopy pilot parachute bridle line, and burns on the "B" cascade and upper control lines. The free bag was never located.

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This incident was caused by an unstable body position. The parachute was packed in accordance with TM 10-1670-287-23&P and a keeper was attached to the chest strap to secure the oxygen hose. The jumper was not stable when he deployed his main canopy. Additionally, he did not look at and feel the main ripcord grip due to his instability in freefall, and according to the jumper, his obstructed view caused by the O2 hose.

ANALYSIS: 49**WHAT WAS THE MALFUNCTION?**

Jumper entanglement with his main parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumpers unstable body position caused jumper to tangle with his parachute.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Stable body position during MFF.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 312 feet MSL	12. SURFACE WINDS (Knots) 0 Knots	13. VISIBILITY (Feet/Miles) Unknown	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE, alice pack, ballistic helmet		16. JUMPER'S POSITION IN ACFT 4R, 3rd pass	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 10
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Entanglement	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The following statement is taken from jumper #4, 3rd pass, right door. He states that he had a good, tight body position when he exited from the aircraft. Jumper states that he had no twists and at approximately 100ft. AGL, a higher jumper drifted into his suspension lines. The higher jumper became entangled in the lower jumper's suspension lines. The higher jumper landed while still entangled in the lower jumper's suspension lines. Both jumpers had lowered their equipment prior to becoming entangled. The lower jumper landed without receiving any injuries, the higher jumper received minor injuries to left leg. The following statement is taken from another jumper. He states that he had a good exit with no twists in his suspension lines. His main parachute deployed at the count of four. He then did a 360 degree check of his canopy and looked for other jumpers. When he reached tree top level he then lowered his equipment. Just as the jumper was about to pull a slip, another jumper crashed into him. Jumper #6 then tried to bounce off of the lower jumper's suspension lines but became entangled. His canopy then collapsed and he hit the ground on his left leg. The jumper received minor injuries to his left leg.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This was an incident, not a malfunction. The Malfunction NCO did not witness this incident, therefore could not properly assess this incident. The only evidence available are the jumper's statements.

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ANALYSIS: 50

WHAT WAS THE MALFUNCTION?

Jumper entanglement with another jumper.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Poor canopy control.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Prejump training that reinforces canopy control.
2. Individual jumper training to correct jumper weakness.

CARGO MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 526 AGL	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 289	12. SURFACE WINDS (Knots) 240m/7	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply Load (Training) 3500 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 1
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute failed to override locks. Platform failed to exit aircraft. Extraction line broke before loadmaster could cut it. Extraction line and parachute not recovered..</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Two screws in the ADS rail face, where the platform rides, were not properly seated and protruded out of the rail. There were marks on the screws and the platform that show platform contact. Which possibly jammed the platform by cocking it in the rail. Lock were tested and worked properly. Thus preventing the platform from exiting</p>				

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ANALYSIS: 51

WHAT WAS THE MALFUNCTION?

1. Extraction parachute failed to override locks.
2. Platform failed to exit aircraft.
3. Extraction line broke before loadmaster could cut it.
4. Extraction line and parachute were not recovered.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Two screws in the ADS rail face where the platform rides were not properly seated and protruded out of the rail extraction line possibly worn or defective causing breakage.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Have -21 inspect platform prior to use of platform.
2. Have maintenance perform ADS rail checks on all aircraft and focus on screws during ADS rail inspection.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE training 3175 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #10, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #10 tested IAW 33D2-37-9-1, lock released at 59.7 ft. lbs.				

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ANALYSIS: 52

WHAT WAS THE MALFUNCTION?

Extraction parachute deployed and inflated but load failed to extract. Load extracted after loadmaster placed right hand control handle to emergency position.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Used for tracking purposes.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not a malfunction - an incident.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600	10. ACFT SPEED (Knots) 140 KCAS	11. DZ ELEVATION (Feet) 190 Feet	12. SURFACE WINDS (Knots) 340 @ 4 kts	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3700 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE Ring Slot 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The 15 foot extraction parachute deployed normally and extracted the platform from the air-craft. Suspension lines of both cargo parachutes elongated fully. Neither cargo parachute inflated. One cargo parachute canopy elongated normally while the second began to wrap around the other. This was confirmed when inspected on the ground as the suspension lines were twisted together. The load impacted the ground approximately 325 yards at 1 o'clock from the Heavy Equipment Point of Impact (PI) and then cartwheeled forward about 12 yards. The extraction line, extraction parachute, deployment line, and G-12 bags landed at about 100 yards and 12 o'clock from the PI. Inspection of the extraction parachute, line and deployment line revealed nothing unusual. One of the G-12 bags was normal. Inspection of the second revealed the following: The locking stow flap had an 8 inch tear on the seam above the first locking slot. Both locking slots were unusually stretched. The suspension line stowage flap was found to be missing. It separated at the seam that attaches it to the G-12 bag. This flap was found within the G-12 paraghutes near the load. There were no suspension line stows attached to the flap or through the locking stow loops. Both locking stow loops were pulled from their seams, but remained as loops. All suspension lines were inspected and were not broken or damaged. There was no damage found on either cargo parachute. The M-1 cargo parachute release was destroyed. The timbers that comprised the load were destroyed. The Type V platform was destroyed.				

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The malfunction occurred during the deployment phase. The opening sequence of one parachute was normal until the second parachute began to twist around the other parachutes suspension lines. Inspection of the malfunction suspension line stowage flap indicated that all locking stows broke the 1/4 inch wide, type I cotton webbing stow ties normally. Damage to each locking stow loop and the tear in the locking stow flap indicate the loops may have tried to pull the suspension lines through the locking slots. This may have been caused by the suspension line stowage flap separation from the G-12 bag. All suspension lines eventually released from the flap and elongated, but the delay in the opening sequence allowed the chute time to wrap around the other.

ANALYSIS: 53

WHAT WAS THE MALFUNCTION?

Cargo parachute failed to deploy normally. The load impacted the ground destroying the load and cart wheeled.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Suspension lines were twisted together. One cargo parachute opened normally, the other one wrapped around the other parachute. Suspension line stowage flap separated from the G-12 bag.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information - no tracking available.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 609 AGL	10. ACFT SPEED (Knots) 142 KCAS	11. DZ ELEVATION (Feet) 289	12. SURFACE WINDS (Knots) 280M/7	13. VISIBILITY (Feet/Miles) +10 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3070 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 2 of 2
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>First platform exited normally. On second platform the extraction parachute failed to open and extract platform. Loadmaster locked platform in aircraft. After short racetrack the extraction line was cut over DZ and recovered.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>One of the ½ inch tubular nylon link safety ties was not removed after being replaced with type III nylon. This change is made on 15 foot extraction packages for sequential platforms on the C-17A. This prevented the opening of the extraction parachute.</p>				

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ANALYSIS: 54

WHAT WAS THE MALFUNCTION?

Second extraction parachute failed to open and extract platform (sequential package).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

One of the 1/2-inch tubular nylon safety ties was not removed after being replaced with type III nylon.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Do not let the JAI loadmaster do any rigging on the airplane.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet MSL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 426	12. SURFACE WINDS (Knots) 1-5	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT 8 Foot Mass Supply	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-11B (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Drogue parachute deployed properly and deployed the 15 foot extraction parachute. The 15 foot extraction parachute failed to inflate. Approximately one minute later the load exited the AC. The G-11B parachute deployed properly and the load landed on the ground safely 2 miles off the DZ. The extraction parachute was recovered. One U-bar connector link was not attached to the adapter web and all but one suspension line came off the connector link. The connector link was bent in a v-shape. The threads in the connector link was not stripped out. There was no damage to any of the air items.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

It is thought that the U-bar connector link screws were missing. When the 15 foot extraction parachute started to deploy the deployment forces caused the cap on the U-bar connector link to separate from the connector link. The suspension lines came off the connector link causing the 15 foot Extraction parachute to not fully inflate.

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ANALYSIS: 55

WHAT WAS THE MALFUNCTION?

15 foot extraction parachute failed to inflate (C-17). Load exited the aircraft late - off DZ.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper inspection of U-bar connector link by the rigger.
2. Internal packing of the parachute.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Quality control in the rigger shop. Final rigger inspection should have caught this during packing phase.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1100 Feet	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 313.5	12. SURFACE WINDS (Knots) 6	13. VISIBILITY (Feet/Miles) Not Given

III. CARGO				
23. TYPE LOAD AND WEIGHT M119/M998 20,420 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-519/ TO 13C7-10-31	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V, 32 Foot	27. TYPE PARACHUTE AND NUMBER G-11B (4)	28. SIZE EXTRACTION/RELEASE PARACHUTE 28-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute deployed from aircraft. Parachute did not fully inflate. As it elongated (possibly achieving a 10 percent fill), there was a loud cracking sound. The load exited the aircraft immediately. The 28 foot heavy duty parachute managed to pull the four G-11Bs from the parachute stowage platform. Two G-11Bs partially deployed out of the deployment bags before the load impacted with the ground. On inspection the following points were noted: EFTC functioned correctly, 3-point link released from latch, M-2 release was in place on top of the load, 28-foot extraction parachute suffered damage.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The aircraft was third of a four ship formation. Aircraft speed did not seem to be faster than the other aircraft. Aircraft altitude was also the same as the first two. The load that malfunctioned seemed to exit the aircraft faster than the other loads, i.e., from the extraction parachute deployment to the load extraction.</p>				

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ANALYSIS: 56

WHAT WAS THE MALFUNCTION?

32-foot heavy equipment load impacted the ground destroying the load. Extraction parachute deflated but still pulled load from the aircraft. Not enough force to separate bags from parachutes.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Extraction parachute failed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Packing proficiency - Buy new 15-foot extraction parachutes.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1,000	10. ACFT SPEED (Knots) Unknown	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) 8	13. VISIBILITY (Feet/Miles) Unknown

III. CARGO				
23. TYPE LOAD AND WEIGHT HMMWV/ Howitzer Combo 20,400 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-519/ TO 13C7-10-31	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 32-Foot Type V	27. TYPE PARACHUTE AND NUMBER G-11 (4)	28. SIZE EXTRACTION/RELEASE PARACHUTE 28-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Deployment phase was normal. LM noticed risers broken. Load landed with two parachutes. Load flipped after contact with ground.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Unknown - Awaiting return of equipment to investigate.				

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ANALYSIS: 57

WHAT WAS THE MALFUNCTION?

Parachute risers were cut. Parachutes failed to deploy properly.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Pack tray may have contacted the risers and cut them.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

No trends noted - Appears to be a one-time event. Requires monitoring.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600 Feet	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 200 Feet	12. SURFACE WINDS (Knots) 0	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Training Load 2900 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ringslot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT F.S. 576
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) One of the G-12E parachutes did not deploy.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Parachute bag riser stow panel ripped away from the parachute bag causing some of the risers to remain in the riser line stow ties.				

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ANALYSIS: 58

WHAT WAS THE MALFUNCTION?

One G-12E parachute did not deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Parachute bag riser stow panel ripped away from the parachute bag causing some of the risers to remain in the riser line stow ties. Possibly improper packing procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information to determine cause of malfunction.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 2260 MSL	10. ACFT SPEED (Knots) 145 Knots	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) 220/12	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy equipment 2640 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE C-17 Drogue 15-Foot Extraction	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 2 of 2

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

15-foot drogue/extraction parachute malfunctioned approximately 9-10 seconds after being deployed. The parachute collapsed and was subsequently jettisoned by the loadmaster. Parachute was recovered and no damage to the aircraft occurred. Upon recovery of the drogue parachute, five panels were completely blown, five of eight suspension lines were broken on one adaptor web near connector link. Three of eight suspension lines were broken on another adaptor near the connector link. The lower lateral band on lines 3, 5, 6, 12, 13, 14 and 15 were ripped. The parachute has had 4.3 hours of major repairs.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The C-17 uses 15-foot extraction parachutes as a drogue parachute. The parachute being used as an extraction parachute and a drogue parachute is putting (the rest of the report was missing).

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ANALYSIS: 59

WHAT WAS THE MALFUNCTION?

15-foot drogue/extraction parachute malfunctioned approximately 9-10 seconds after being deployed.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

This parachute is not designed to be towed for this amount of time at this speed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Parachute is in the process of being upgraded.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 Feet	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+ Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Training Platforms 3150 + 2950 respectively	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V 8 Foot Platforms	27. TYPE PARACHUTE AND NUMBER G-12E (2 per load)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 575; FS 547
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Both loads exited its respective aircraft. Upon landing on the DZ, neither M-1 disengaged the parachutes. No damage to the people, planes or the training platforms. No damage to any airdrop equipment.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Inspection of both M-1 release assemblies did not reveal anything specific. The back side plates of the M-1's have indentations in the channel for the retainer clamp and pin. The parachute connectors were milled with different thicknesses. The timers in both M-1's worked. After a thorough investigation of both M-1's no solid explanation could be reached. Reason for the M-1's not releasing the parachute is UNKOWN.</p>				

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ANALYSIS: 60

WHAT WAS THE MALFUNCTION?

M-1 releases did not disengage the parachutes.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper inspection procedures?
2. Bad parachute connector.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

No enough information for constructive reason.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 feet	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Training Platforms 3620 + 3150 respectively	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V 8-Foot Platform	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Extraction	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 475; FS 575
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Both loads exited their respective aircraft and deployed normally. The malfunction was the M-1 release assemblies did not release the parachutes once the loads landed on the DZ. No damage to the planes or the loads and airdrop equipment.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The suspected cause on these two loads are the timers. On inspection of the timers to each M-1, the back plates were loose. The screws were loose on both timers. One timer was missing a screw. The timers were taken out of service for rework.</p>				

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ANALYSIS: 61

WHAT WAS THE MALFUNCTION?

M-1 release assemblies did not release the parachutes once the loads landed on the DZ.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Suspected cause on these two loads are the timers. One back plate was loose. The screws were loose on both timers. One timer was missing a screw.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Take timers out of Air Force inventory or follow better inspection procedures.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1196 Feet AGL	10. ACFT SPEED (Knots) 148 KCAS	11. DZ ELEVATION (Feet) 1163 Feet	12. SURFACE WINDS (Knots) 10-12 Knots	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3,200 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V - EFTC	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1085
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>This was a local training mission airdrop that was uneventful up to the release point checklist. At approximately fifteen seconds prior to the release point, the 15-foot drogue parachute was deployed IAW T.O. procedures. Approximately five seconds after the drogue parachute inflated, it blew out an undetermined amount of panels and collapsed. The parachute was jettisoned without incident and the aircraft continued its' mission.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>After an inspection by parachute riggers, it was determined that the initial cause of this drogue malfunction was parachute panel failure. The panel failure led to significant skirt and canopy line damage. This particular drogue parachute was manufactured on 12 Mar 97 and was used a total of twelve times. The investigative team found no definite conclusion for the panel failure. NOTE: This was the second of two drogue malfunctions on this mission.</p>				

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ANALYSIS: 62

WHAT WAS THE MALFUNCTION?

15-foot drogue/extraction parachute malfunctioned approximately 2 seconds after the parachute inflated.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

This parachute is not designed to be towed for this amount of time at this speed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Parachute is in the process of being upgraded.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Not Given	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 24,900	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 1300	12. SURFACE WINDS (Knots) 4	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT LVAD weight tub 41,900 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 20 Foot Type V	27. TYPE PARACHUTE AND NUMBER 94 Foot (3)	28. SIZE EXTRACTION/RELEASE PARACHUTE 28-Foot (2)	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 765
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Airdrop was conducted and load exited without any problems. Post drop inspection of the aircraft revealed a 20 inch x 1 inch crack in the floor at FS 1065, BL 0.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) This was an airdrop of the Long Range Air Launched Target (LRALT) from 24,900 MSL. For this particular test load there was a 9 ft. extension between the EFTC link assembly and a floating 3 pt link assembly that connected to the 120 ft. main extraction line. After the opening shock of the extraction parachutes, the whiplash action of the extraction line caused the floating 3 pt. link to contact the aircraft floor. Major repair to the floor is expected.				

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ANALYSIS: 63

WHAT WAS THE MALFUNCTION?

3 Point link on test extraction system punched a 1-inch X 20-inch hole in the floor.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

3-point link.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

This was a test load. Repad or rethink extraction.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 798 Feet AGL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 210/12	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3595 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 871
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At approximately 15 seconds prior to green light, the drogue parachute was deployed but failed to fully inflate and was jettisoned. The instructor loadmaster stated he saw the drogue chute start to inflate and then collapse into a tangled ball and the decision was then made to jettison it. The drogue chute was jettisoned and the aircraft landed without further incident.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The drogue chute had five of eight suspension lines broken on one side of the adapter web. Two suspension lines appeared to have been cut within six inches of the U-link on the adapter web. A third line broke approximately four feet from the U-link. Two other lines were broken closer to the canopy skirt and one of these lines had two knots in it. The three remaining suspension lines that didn't fail had blown panels in the canopy. The eight suspension lines on the other side of the adapter web were serviceable and there were no blown panels in the canopy. This part never inflated due to entanglement of the broken suspension lines from the other side. The suspected cause of this malfunction is if the two lines closest to the U-bar failed and wrapped around the remaining suspension lines thus preventing the chute from fully inflating. The three other lines are suspected to have failed from stress. The damage was not more wide spread due to the fact that the chute never fully inflated.</p>				

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ANALYSIS: 64

WHAT WAS THE MALFUNCTION?

C-17 drogue parachute failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Material failure.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Parachutes need to be upgraded.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 5550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Aft Edge 700
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) M-1 DID NOT RELEASE MAIN PARACHUTES ONCE ON THE GROUND.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) M-1 FAILED TO RELEASE G-12S, TIMER DID DROP DOWN. M-1 TIMER WAS NOTED AT 13 SECONDS ON BEFORE LOADING CHECKS. M-1 WAS TAKEN APART BACK IN THE SHOP, ALL CHECKED GOOD, TIMER WAS CHECKED AGAIN AT 14 SECONDS.				

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ANALYSIS: 65

WHAT WAS THE MALFUNCTION?

M-1 did not release main parachutes once on the ground.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Intermittent timer.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Bad timer - Not enough information.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1500 Feet AGL	10. ACFT SPEED (Knots) 190 KIAS	11. DZ ELEVATION (Feet) 5550 MSL	12. SURFACE WINDS (Knots) NA	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Aft Edge 680
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At 10 minute warning, after left hand locks were removed the platform rolled aft. Platform secured and drop sequence terminated. Landed without any further problems.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>#9 lock set at 2.50. Right hand lock released prematurely after left hand locks were removed. Lock verified engaged by JAI and crew loadmasters (1 evaluator and 1 instructor). Right locks tested good by maintenance.</p>				

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ANALYSIS: 66

WHAT WAS THE MALFUNCTION?

Loose platform prior to green light.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Failed right hand lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Standardize -21 checks of locks. Ensure/Brief loadmasters and JAIs to double check “fingers between rollers”.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1000 AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1424	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 9999

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 2937 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 650
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction phase worked fine. During the deployment phase when the M-1 elongated the suspension slings causing the deadman to break. The heavy equipment platform then proceeded to tilt forward and landed on the EFTC latch. Upon inspection the only damage noticed was extreme burns to the left and right forward suspension slings.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Upon further inspection, the deadman was found to be rigged incorrectly. The left side of the deadman was rigged at 7 inches above the top of the load. The right side of the deadman was rigged at approximately 2-3 inches above the load. To further complicate things, the deadman was also rigged wrong in that it did not start at the right forward suspension sling. Instead it was started at the left aft suspension sling. It was also incorrectly tied at the left aft suspension sling.</p>				

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ANALYSIS: 67

WHAT WAS THE MALFUNCTION?

Heavy equipment platform landed on the EFTC latch.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Rigger's error on deadman's tie.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure better rigger training.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 550	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 240	12. SURFACE WINDS (Knots) 010@13 Knots	13. VISIBILITY (Feet/Miles) 7+ miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Type V Heavy Training Platform 2850 lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V Plat-form 8 Foot	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RE-LEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 2
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Training platform exited the plane, parachutes deployed. Upon landing on the drop zone, the M-1 failed to release the parachutes. No damage to the aircraft, the training platform or the parachutes. Inspection of the M-1 indicated that the timer keys did not release.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The M-1 was broken down and thoroughly inspected. On inspection of the timer assembly, (part no. 11-1-894-1), two of the four screws on the back plate of the timer box were loose. The suspected cause of the malfunction was a loose back plate. The fingers jammed open. The timer was fixed, bench tested seven times, marked for future reference. The timer was put back into the inventory.</p>				

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ANALYSIS: 68

WHAT WAS THE MALFUNCTION?

M-1 release did not disengage the parachutes once on the ground.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper rigger inspection.
2. Loose screws on timer plate.
3. Bad timer.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Remove timer from inventory.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 2700 MSL	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) 1424 MSL	12. SURFACE WINDS (Knots) 320@10	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply Heavy Equipment 3135 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) EFTC
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V Platform	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 647

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
Wing training heavy equipment platform failed to extract with 15 foot extraction parachute fully deployed outside the aircraft. Minor to moderate turbulence was encountered by the aircrew. Following emergency procedures the secondary loadmaster cut the 60-foot two loop extraction line and parachute away. No damage to the aircraft or equipment. The extraction parachute was not recovered.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
At green light the extraction parachute was deployed and fully inflated. The platform failed to extract due to the left hand number eleven lock still being engaged in the platform. Subsequently, the loadmasters applied emergency aft restraint and cut the extraction line and parachute away. Upon investigation, it was determined that the sleeve that holds the sequential draw bar together between the number ten and eleven lock had slid fully aft and was not in the seated position. This attributed to the number eleven lock remaining engaged in the platform. The draw bar sleeve was reseated to the full forward position and an operational checkout of the dual rails was conducted by maintenance in accordance with their job guides. No discrepancies were noted and there was no indication that the draw bar sleeve came into contact with anything that would preclude the sequential operation of the left hand locks. Multiple attempts at duplicating the malfunction were to no avail. We believe the malfunction was caused by the loadmaster failing to ensure that the sleeve was fully seated forward during the preflight. The loadmaster stated he pulled the sleeve forward until it stopped but did not visually verify that it was fully seated.

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ANALYSIS: 69

WHAT WAS THE MALFUNCTION?

Heavy equipment platform failed to exit airplane with 15 foot extraction parachute fully deployed outside the aircraft. Sequential draw sleeve not in proper position.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Left hand lock malfunction.
2. Slip back in platform after being retracted.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Pay closer attention during preflight of the dual rail system.
2. Ensure draw bar sleeve is in the full forward position.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650A	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) 185	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training Load 3250 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) TO 13C5-26-2	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V 8-Foot	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 520
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) During a training mission dropping an actual Heavy Equipment training load, the HE load failed to extract during the red light time of 8.0 seconds. The load deployed 1-2 seconds after the red light call and subsequently landed 212 yards past the end of the drop zone. Sequence of Events: Upon navigator's Green Light call and subsequent activation of the ADS switch, the extraction chute dropped normally from the bomb rack and exited the aircraft. It appeared that the extraction chute did not extend as far out of the aircraft into the slipstream as normal and the parachute did not deploy. The loadmasters' noted the extraction chute was flailing around 9 foot behind the ramp and that the extraction line was not fully extended the entire 60-foot length. After a few seconds of observing this condition, the primary loadmaster called malfunction due to what he considered and excessive delay. The Red Light call was made almost immediately after the malfunctions call. As the loadmasters' were about to make the move to secure the load by applying the chains, the extraction line extended and the extraction chute fully deployed and the load exited normally. Upon exit from the aircraft, the main parachutes appeared to deploy normally. The load landed off the DZ. Negative damage was done to equipment or personnel.				

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The unit's Malfunction Review Board could not determine the cause of this anomaly. All loadmasters involved in the airdrop witnessed slack in the 60 foot extraction line after the 15ft ring slot extraction parachute was released. It was also noted that the extraction parachute was under the tail or close to the ramp and not fully extended the entire 60 foot length. According to the personnel at Ft Lee, there was a case where the extraction line momentarily snagged on the roller system and delayed full extension of the extraction line. Although all loadmasters noted slack in the extraction line after parachute release, it could not be determined if the line was caught. An evaluator loadmaster on board felt in his opinion the extraction line appeared to be snagged by the 550 cord on the 30D tab. In his opinion, the parachute was trailing about nine feet behind the ramp, which could coincide with being caught on the tab. However, all board crewmembers and the evaluator loadmaster agreed that it is highly unlikely to snag on the 30D tab.

ANALYSIS: 70

WHAT WAS THE MALFUNCTION?

Unilateral HE failed to exit the aircraft. Extraction parachute was stuck 9 foot behind the ramp instead of 60 feet. After 2 seconds the extraction line elongated and extracted the load - 212 yards long.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not enough information - May be a one time event. No trends noted at this time. Extraction may have been caught on roller conveyors.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

None at this time.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1170	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 1424	12. SURFACE WINDS (Knots) 4@320	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3113 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E(2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 680
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At green light the extraction parachute released from the bomb rack and went into the slipstream. The extraction parachute opened momentarily then separated from the extraction line and fell to the ground. Secondary Loadmaster reported seeing "pieces" fly from the extraction line when separation occurred. Emergency procedures were conducted and the extraction line was cut over the drop zone. Training was discontinued at that point and the aircraft returned to base. Extraction parachute recovered along with the extraction line. Only one spacer was recovered from the Type IV connector. The only damage incurred was the cutting of the extraction line and loss of Type IV connector link.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Examination of the extraction parachute and extraction line did not reveal any signs of damage or marks to the loops where the Type IV was installed. Evidence points to the Type IV connector link failing during the extraction phase, resulting in the separation of extraction parachute from the extraction line prior to overriding the right-hand dual rail lock. The entire Type IV connector link not recovered. Possible causes: Type IV not properly closed prior to green light, material failure of the Type IV, or the keeper on the after end of the extraction line slid down allowing the extraction line to pull against the faceplate of the Type IV. JAI and aircrew loadmaster both stated all keepers were securely taped and that the faceplate was correctly installed.</p>				

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ANALYSIS: 71

WHAT WAS THE MALFUNCTION?

Extraction parachute released from the bomb rack and went into the slipstream. The extraction parachute opened momentarily then separated from the extraction line and fell to the ground.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Type IV not properly closed prior to green light.
2. Type IV connector link may have failed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure type IV connector link is properly locked during rigging and JAI.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 145 KIAS	11. DZ ELEVATION (Feet) 1175	12. SURFACE WINDS (Knots) 260/5	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3140 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Low Velocity Type V	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1020
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Fifteen seconds out from the airdrop the drogue deployed normally. At "green" light the tow release mechanism deployed properly allowing the drogue parachute to pull the extraction package from the ramp. As the extraction line elongated, the extraction parachute seperated from the extraction line. The loadmaster performed the proper malfunction procedure of releasing the right rail locks. The platform exited the aircraft slowly, resulting in an off DZ drop. The extraction or main parachute did not deploy during the sequence. The platform was destroyed on impact.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The suspected cause of the malfunction is extraction line material failure. The line severed at the point where it wraps around the bolt on the two-point link assembly. However, it is possible that the extraction parachute connector link plate covers may have contributed to the extraction line failure. The link plate covers used have sharp edges that may cut the extraction line enough to allow line failure due to the forces applied during the extraction phase.</p>				

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ANALYSIS: 72

WHAT WAS THE MALFUNCTION?

1. Extraction parachute separated from the extraction line.
2. Slow exit.
3. Off DZ.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Unknown - Logically appears to be material failure.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure in-depth inspections and brief/train on how to recognize dry-rotted material.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2612 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) Dual Rails
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E.(2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #10
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At green light the extraction phase started normally. The extraction chute fully deployed but before the right hand lock could be over rode, one ply of the extraction line broke at approx. 31 inches aft of the 3 point link. The extraction line fed through the 3 point link, leaving the load in the aircraft. No other damage to load or aircraft.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Suspect the extraction line was damaged either before loading or during the upload of the platform. Upon examination of the extraction line, there was abrasion marks at the breaking point on one side of the broken ply.</p>				

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ANALYSIS: 73

WHAT WAS THE MALFUNCTION?

One ply of the extraction line broke at approximately 31 inches aft of the 3-point link. The extraction line fed through the 3-point link, leaving the load in the aircraft.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Suspect the extraction line was damaged either before loading or during upload of the platform.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Establish a better way to load platforms on the airplane. Recommend the platforms be loaded with the extraction line being connected to the platform during loading.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2576 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) Dual Rails
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 26-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #9
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right Hand cross over Pulled. Extraction parachute good, fully inflated				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Locked # 9 checked by maintenance. Checked good. Cause unknown.				

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ANALYSIS: 74

WHAT WAS THE MALFUNCTION?

Extraction parachute deployed and inflated but load failed to extract.
Load extracted after loadmaster placed right hand control handle to emergency position.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Used for tracking purposes.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not a malfunction.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2576 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) Dual Rails
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 26-Foot Ringslot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #10
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right Hand cross over Pulled. Extraction parachute good, fully inflated				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Locked # 10 checked by maintenance. Checked good. Cause unknown.				

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ANALYSIS: 75

WHAT WAS THE MALFUNCTION?

Extraction parachute deployed and inflated but load failed to extract. Load extracted after loadmaster placed right hand control handle to emergency position.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Used for tracking purposes.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not a malfunction.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1270 MSL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 483	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 5+

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Training Platform 3500 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G12-E(2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 517
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Slowdown checks were completed, the left hand locks were retracted and the loadmasters visually checked them. Before extraction the number 11 left hand lock fell back in. During the extraction the #5 dual rail cover popped up approximately 1 foot into the air and the platform jammed the lock back out of the dual rail and broke the lock on the back side. The platform exited with no further incident.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The number 11 left hand lock fell back in due to the simul rod sleeve sliding off. The pre-flight of the rails and the first heavy equipment drop went without incident.</p>				

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ANALYSIS: 76

WHAT WAS THE MALFUNCTION?

#11 lock left side reengaged into the locked position during extraction phase. Lock was severed from the airplane. No damage to airdrop platform.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Drawbar plunger was not properly inspected.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure that the sleeve is positioned in the full forward position and the locking ball is serviceable.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1025 MSL	12. SURFACE WINDS (Knots) 9-12 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1050 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE Pilot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Pulley Sta 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Air Drop Incident: Load departed aircraft normally, during deployment phase it appeared that a suspension line had crossed over the top of canopy. While inspecting the canopy, I found burn marks on the outside of the canopy. No other damage was found with the load. Two other loads were dragged 150 yards plus.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Rigging error. The Anemometer was broken. Only 2 of the 3 cups were intact.				

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ANALYSIS: 77

WHAT WAS THE MALFUNCTION?

Line over.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

High winds

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Have good anemometer and winds within limits.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 798 AGL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 190/7	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3520 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RE-LEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 950
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At approximately 15 seconds prior to the release point, the PDM (parachute deployment mechanism) deployed the drogue parachute. The parachute and drogue line elongated and completed a normal inflation. The aircraft continued a normal drop sequence and at 6 seconds prior to release, the drogue parachute collapsed. A malfunction was immediately called and the loadmaster jettisoned the drogue parachute and line. The aircraft landed without further incident.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The drogue parachute collapsed from catastrophic material failure. Five of eight suspension lines on one side of the adapter web broke near the L-link. The remaining three suspension lines had blown or damaged panels in the parachute skirt. The other side of the adapter web had one broken suspension line near the L-link and two damaged panels. This chute was manufactured in May 1992 and placed into service on October 1997 and was on its ninth airdrop.</p>				

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ANALYSIS: 78

WHAT WAS THE MALFUNCTION?

15-foot drogue/extraction parachute malfunctioned after being deployed in the slip stream

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

This parachute is not designed to be towed for this amount of time at this speed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Parachute is in the process of being upgraded.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE C-17	4. TYPE ACFT	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000 AGL	10. ACFT SPEED (Knots) 156 KIAS	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 100/6	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 715 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E.(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 885
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The container exited the aircraft normally. The pilot parachute deployed and the suspension lines elongated, but never pulled the G-12 off the load. The load impacted the ground and was totally destroyed.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Inspection of the pilot parachute revealed that all eight suspension lines were shredded and/or cut/frayed midway between the canopy and the L-link. The pilot parachute suspension lines appeared weathered with evidence of dry rot.</p> <p>Suspected cause of malfunction appears to be material failure.</p>				

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ANALYSIS: 79

WHAT WAS THE MALFUNCTION?

Cargo parachute did not deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Material failure due to poor inspection of equipment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure equipment is inspected correctly and removed when out of limits.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 630	12. SURFACE WINDS (Knots) 6 Knots	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Replicated 105MM ICM 1940 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-53/ TO 13C7-18-41	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	CVR Left Side
26. TYPE PLATFORM/AIR-DROP CONTAINER Single A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 68-inch pilot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1st left side

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

2 X CDS bundles exited the aircraft (C130D). It appeared to be the second bundle came in contact with bundle #181's pilot parachute severing 5 suspension lines on the pilot parachute at 32 inches from the lower lateral band, culminating in a total malfunction of the pilot parachute which resulting in the main 1 X G12-E to not deploy completely. Upon inspection, burns to the G12-E deployment bag resulted from the contact that was made from the second bundle. Burns to the left set of risers were noticed along with cuts resembling the deminsions of the skid board approximately 1 inch wide and across the riser diagonally. All canopy ties and connector link ties were broke. All suspension line ties were intact. The centering line was routed correctly and not twisted. Approximately two feet of canopy was still in the deployment bag upon impact. Upon inspection of the G12-E it was packed IAW TM 10-1670-281-23&P. Damage to the A-22 container was extensive due to impact of the load with the ground. The load (Replicated 105MM ICM ammunition, concrete rounds in ammunition boxes) was completely destroyed beyond recovery.

32. CAUSE OF MALFUNCTION/FAILURE (if more space is needed, continue on reverse.)

Impact of # 2 Load with #1 load at the pilot parachute deployment segment of the deployment sequence. Resulting in no lift capability for the G12-E Main parachute to fully elongate and deploy. Resulting in no lift capability for the A-22 container. Resulting in a total malfunction of the load.

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ANALYSIS: 80

WHAT WAS THE MALFUNCTION?

CDS bundle impacted the ground, causing loss of load.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient information. (weight of both bundles) (deck angle).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Insufficient information.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 Feet	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7>

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1210 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE Pilot Parachute	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 510-550
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) During the CDS drop the static line took an inordinate amount of time to cut the type 26 nylon release gate, resulting in a larger than normal amount of recoil of the guillotine knife, resulting in damage to the pulley. The load exited the aircraft and deployed normally. Inspection of the A-22 sling cargo bag revealed no damage or marks of any kind. There was no damage to the plane. The nylon release gate was cut clean with no evidence of binding or twisting. The guillotine knife was sharp and in good condition. The pulley and gate locations were positioned according to the directives. A subsequent pull test of the left static line retriever revealed no defects.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Unknown.				

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ANALYSIS: 81

WHAT WAS THE MALFUNCTION?

Slow CDS cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Loose gate.
2. Gate and pulley location at 40 inch limit.
3. Static line could have come out of pulley.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure gate is tight and pulley location is not at limit (use 530).

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 147 Feet	12. SURFACE WINDS (Knots) 030/8 Knots	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 700 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1/1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 495
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) CDS was rigged with 2-metal 55 gallon drums and 2 plastic drums (NSN 8110-01-150-0677.) Metal barrels were placed on the forward left and aft right side of the skid board, the plastic barrels were placed on the right front and aft left skid board. The plastic drums were the ones filled to get the total weight of 700 pounds. Once rigged on the airplane with the pulley at FS.550 and the gate at FS.517 the cable slack was adjusted to 2 inches. During the drop, the plastic drum was compressed by the release gate. The knife having broke the 80 pound tie only cut approximately 1/8-inch into the gate. The retriever winch (serial # 1058, model # 1184R125, last inspection 5 Jun 00, last overhauled 28 Sep 98, limit switch gap 3/32 inch, both beaded chains were 5 inches, cup was seated, good spring condition, limit switch engaged to cut off the winch, run time was 3 seconds, pull test was 1600 pounds). After being derigged the winch was found to have over loaded the current limiter.				

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The barrel was slightly compressed by the gate at the waterline (approximately 18 inches from the bottom of the barrel) during the CDS after loading (rigging). At green light, when the retriever winch rewound it pulled on the gate, and the gate was pulled into the barrel, compressing the barrel instead of cutting the release gate. The suspected cause of the malfunction was not enough water in the barrel. The knife was sharp, and was not caught on anything, no turbulence was encountered, and the limit switch screw was safetied with safety wire.

ANALYSIS: 82

WHAT WAS THE MALFUNCTION?

CDS gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Plastic barrel collapsed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Use a release gate load spreader or use barrels that will withstand the pressure.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1010 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1040	12. SURFACE WINDS (Knots) 6 Knots	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 CDS Single Bundle 1050 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 137-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 530

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At release point the Lape/CDS system cut off after 1 second. Gate failed to cut.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This drop was utilizing the right static line retriever winch. This was a Western gear retriever winch that had been written up in the 781 the previous week for cutting off retrieving personnel static lines using TPRS. (This -2 is being submitted also piggybacking on this one.) Maintenance could not duplicate this write up on the ground for the write up previous and asked the loadmasters to utilize the right switch for the CDS drop. You bet it happened again and cut off after approximately 1 second. Maintenance replaced the entire static line retriever winch. The retriever winch cup would not stay in the track under a load and prematurely cut the the winch off. The beaded chains were correct at 4 3/4 inches.

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ANALYSIS: 83

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad static line retriever or FS rig should be aft of 550 for right SLR.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Replace SLR.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 4071 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 4	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 464
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>This was a single stick 4 bundle mass drop. The #2 static line broke upon exit. Depolyment was normal and the load landed on the DZ. The right anchor cable sustained chafing and broken wires. One broken static line.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>At green light the gate cut normally, and upon exit the # 2 deployment bag became entangled with the # 3 bundle. This in turn caused the anchor cable stop to slide from F.S. 773 to approx. F.S.893. The weight of the #3 bundle broke the #2 static line at the girth hitch knot.</p>				

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ANALYSIS: 84

WHAT WAS THE MALFUNCTION?

Static line on #2 bundle broke causing damage to anchor cable.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient information.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Insufficient information.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1000 MSL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) 040/04	13. VISIBILITY (Feet/Miles) 7 SM

III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 CDS 1000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR/Non-CVR
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-14.(2)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 530

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

During a local training mission sortie, an airdrop equipment malfunction occurred that caused damage to one A-22 container webbing, skid board, and four plastic 55 gallon drums. Noted by the DZO and DZLM upon the aircraft passing over the drop zone, when the container had exited the aircraft, the two static lines started to deploy the cargo parachutes out of the bags. When the container left the aircraft, the parachutes separated from the container and the container impacted the ground without the parachutes attached. Asked the aircraft loadmasters if the container exited the aircraft without any problems and they noted no problems. All equipment was recovered and found to be still be in servicable condition except the nut and bolt from the clevis that attaches the 120-inch connector strap to the cargo parachute and the four suspension webs that attach to the container.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

During the After loading inspection from the DD-1748-1 the aircraft loadmaster and the J.A.I. were confident that the bolt and nut were rigged as per the rigging manual. The nut either came loose during the extraction phase of the airdrop or the bolt broke during the deployment phase of the airdrop.

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ANALYSIS: 85

WHAT WAS THE MALFUNCTION?

CDS load impacted the ground without cargo parachutes.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper rigging and AFJAI inspection procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Get rid of G-14s.
2. Riggers and JAIs need to pay more attention to detail.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1100-1200	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 700	12. SURFACE WINDS (Knots) Dead Calm	13. VISIBILITY (Feet/Miles) 15

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 750 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 48-inch X 48-inch SB w/water barrel	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 60-Inch Pilot Parachute	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 2
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Parachute did not inflate upon parachute deployment. CDS struck ground at a high velocity causing the load to bounce into the air about 8 feet and causing one of the water barrels to burst open, spilling out the water inside.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Parachute riser lines were installed wrong on the connector links. Parachute was received new and had the 9-16 and 17-24 risers on the G-12 installed backwards causing the parachute risers to twist upon deployment thus robbing the parachute of any air.				

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ANALYSIS: 86

WHAT WAS THE MALFUNCTION?

CDS bundle impacted ground without fully inflated cargo parachutes.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper rigging and inspection procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper line layout inspection procedures are followed.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 780	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 170	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) CAVU

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3750 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V 8 Foot	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE HE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 640
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Center line broke approximately 73 inches from centering line attachment to parachute apex. Severe damage to parachute to include gores ripped out.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Material defect in centering line.				

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ANALYSIS: 87

WHAT WAS THE MALFUNCTION?

Center line broke approximately 73 inches from the parachute apex, causing severe damage to parachute and gores.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Material defect in centering line.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper packing inspection procedures are followed.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1000 MSL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1424 MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT High Velocity CDS 800 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	High Velocity
		2		
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 Water Barrels	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 650
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>As the second CDS exited the aircraft the parachute cigar rolled until the load was about fifty feet above the ground. The parachute then unraveled and subsequently fully opened at 20 feet. The CDS was a total loss.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Upon investigation, it was found that the parachute had been repacked in Lyneham, England on a deployment in field conditions. On a side note, we dropped a total of 12 High-V CDS loads with 26 foot parachutes that were field packed in the same environment with no malfunctions. The parachute was manufactured in November 1994 and put into circulation in 1998 and last inspected and repacked on 15 July 2000 in Lyneham. The parachute has been utilized 19 times. On sight investigation of the parachute and bag showed no visual damage, no friction burns, or any obstructions. The only plausible cause of this malfunction is that the lines got twisted inside the bag during repack and this caused the air channel to be congested during the deployment of the parachute.</p>				

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ANALYSIS: 88

WHAT WAS THE MALFUNCTION?

CDS load impacted ground at high rate, destroying load.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper parachute packing procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper procedures are followed.

AIRCRAFT MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training 680 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) High Velocity
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT C/B 573
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light the retriever did not activate. Retriever and CDS system ops checked IAW during power on preflight. Western Gear model # 1184R100, serial # 775. Left retriever. Cup was seated. Limit switch did not engage. Limit switch gap was IAW and safety wired. Spring condition was good. Beaded chain length top/bottom 4 7/8. No turbulence encountered. Pull test not required. Knife sharp. Retriever did not run. 80 lb. did not break. Knife did not get caught on anything. NON-CVR, Pulley F.S. 617, Gate location F.S. 597, Load C/B F.S. 573. Maintenance performed a CDS system ops check on 12 May 2000. The retriever had been written up for running only for 2 seconds. Maintenance replaced the timer and the CDS system ops checked IAW. No training or flying hours lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Bad timer. A CDS system ops check was performed by maintenance and JAI, the retriever did not activate at green light. Maintenance replaced the timer and the CDS system ops checked IAW.				

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ANALYSIS: 89

WHAT WAS THE MALFUNCTION?

Retriever winch did not activate at green light.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad CDS timer.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Replaced timer, system checked good.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 600	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2875 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT C/B 590
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock # 8, setting 2.50. No damage or training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock # 8 tested IAW 33D2-37-9-1, lock released at 62.7 ft. lbs.				

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ANALYSIS: 90

WHAT WAS THE MALFUNCTION?

HE did not exit with extraction parachute fully inflated.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible bad right hand lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Prepare a lock tester that can test at variable lock setting.
2. Reinstate roller check in preflight of right hand lock.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/MASS 2624 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #15
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right hand cross over pulled. Extraction parachute good fully inflated. No damage to load or aircraft..				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock #5 checked by maintenance. Checked good. Cause unknown.				

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ANALYSIS: 91

WHAT WAS THE MALFUNCTION?

HE did not exit with extraction parachute fully inflated.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible bad right hand lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Prepare a lock tester that can test at variable lock setting.
2. Reinstate roller check in preflight of right hand lock.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 200	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Not Given	24. RIGGED IAW (TM/TO/NAVAIR No.) Not Given	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>This western gear static line retriever winch failure happened after a 6 jumper personnel drop out the right door. TPRS training was being conducted for an initial personnel airdrop requirement for new students. After the drop, the static line retriever winch cut off, not running at all to retrieve the 6 personnel static lines. Manually the static lines were pulled into the aircraft. No more drops were conducted out the right door. The 781 was annotated. Maintenance personnel back at home station could not duplicate this write-up on the ground releasing the aircraft to fly the next Wed. for a single bundle CDS drop. This attributed to a gate failed to cut malfunction already submitted to you. The defective winch has been replaced on the aircraft after the CDS incident. The winch preflighted OK on the ground on both drops previously mentioned.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Western gear static line retriever winch system failure.</p>				

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ANALYSIS: 92

WHAT WAS THE MALFUNCTION?

Static line retriever winch cut off during personnel static line retrieval.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad static line retriever winch.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Replace WGSLRW.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2975 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 550 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #7, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #7 tested IAW 33D2-37-9-1, lock released at 55 ft. lbs.				

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ANALYSIS: 93

WHAT WAS THE MALFUNCTION?

Load did not extract with fully inflated extraction parachute..

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible bad right hand lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Prepare a lock tester that can test at variable lock setting.
2. Reinstate roller check in preflight of right hand lock.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2600 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #9, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #9 failed pressure check, lock replaced.				

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ANALYSIS: 94

WHAT WAS THE MALFUNCTION?

Load failed to extract with fully inflated extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad #9 lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Replaced right hand lock.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2700 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #9, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #9 tested IAW 33D2-37-9-1, lock released at 51.7 ft. lbs.				

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ANALYSIS: 95

WHAT WAS THE MALFUNCTION?

Load failed to extract with fully inflated extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Replace right hand lock.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass Supply 2645 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 670/ Lock #10
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute deployed and load failed to extract. Right hand control handle activated, load extracted. All other extraction/deployment sequences were normal. No damage to load or aircraft.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Lock #10 checked good by maintenance. Cause unknown.</p>				

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ANALYSIS: 96

WHAT WAS THE MALFUNCTION?

Load failed to exit with fully inflated extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not Given..

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 3175 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #10, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #10 tested IAW 33D2-37-9-1, lock released at 59.7 ft. lbs.				

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ANALYSIS: 97

WHAT WAS THE MALFUNCTION?

Load failed to exit with fully inflated extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not Given

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1250 AGL	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) Sea Level	12. SURFACE WINDS (Knots) 15 Knots	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CRRC Double X 2 2700 Lbs and 2400 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-542/ TO 13C7-51-21	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER CRRC	27. TYPE PARACHUTE AND NUMBER G-12E (2 Each)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 2 FS 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right hand static line retriever (WESTERN GEAR), failed to cut the release gate on the aft most platform upon activation of the green light at the release point. The pulley assembly was installed at F.S. 530. The aircraft loadmaster stated he saw the cable start to rewind and stopped. He looked at the compression spring and cup and they were seated properly.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The R.H. static line retriever winch was checked upon return to home station. The beaded chains both measured 5 inches in length. A Type VIII nylon release gate was installed at F.S.530. On activation the cable rewound and the gate cut. It was noted that the set screw had only one thread showing through the contact plate for the micro switch. The contact plate return spring may be weak. But test results were inconclusive.				

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ANALYSIS: 98

WHAT WAS THE MALFUNCTION?

Static line retriever failed to cut Type VIII nylon gate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Right hand retriever rigged at FS 530 may have caused premature shut off.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Do not rig right hand winch when using pulley rigged forward of FS 550.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 4077 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 4	CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 520

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The drop was set up to be a 4 bundle mass using the CVR. The right 2 bundles exited normally. The left type XXVI release gate failed to cut. The 80lb safety tie was broken, the type XXVI release gate was partially cut and rolled up inside of the release knife.

Static Line Retriever Malfunction Report: Left retriever used; Spring condition good; Beaded chain length within limits; Cup seated; Limit switch did not engage to cut off retriever; Limit switch screw was safety wired; Limit switch gap within limits; Pull test completed by maintenance-1600lbs; Retriever ran for approx 3 to 4 seconds; 80 lb broke; Knife did not get caught on anything; Knives were sharp; Pulley was located at FS 550; Gate was located at FS 590; CVR was utilized; no turbulence; Loss of one training sortie for all crew positions and delay of formal school student training.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Unknown

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ANALYSIS: 99

WHAT WAS THE MALFUNCTION?

Static line retriever failed to cut type XXVI release gate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Loose gate or wrong angle on knife.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure gate is tight and try to maintain 90 degree angle on knife.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1132 m/750 a	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 426	12. SURFACE WINDS (Knots) 350/10	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HV/CDS 1220 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) High Velocity
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER 48 x 48 CDS Non-CVR	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Prior to the drop after pre-slowdown checks were completed loadmasters noticed the red lights flickering in the cargo compartment. After the ramp and door opened every thing seemed fine, red lights were normal. At green light pilot activated his green light switch and no green light occurred and system did not activate, gate was not cut and load did not exit				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) After the Aircraft landed Wing Tactics tried to duplicate the malfunction but could not get the red light to come on from the pilots switches, co-pilots switches worked normal and activated the system cutting the gate. Suspected cause was a malfunction with the pilots drop switch				

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ANALYSIS: 100

WHAT WAS THE MALFUNCTION?

Gate failed to cut at green light.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Use of pilot switches without proper preflight of pilot switches.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Switches did not work and were replaced.
2. Ensure that whatever switches are preflighted prior to use.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2632 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #9
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and the load failed to extract. Right hand control handle pulled to the emergency position, load extracted. All other extraction/deployment sequences were normal. No damage to load or aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock #9 checked good by maintenance. Cause unknown				

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ANALYSIS: 101

WHAT WAS THE MALFUNCTION?

Load failed to exit with extraction parachute fully inflated.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not Given

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2760 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #9
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and the load failed to extract. Right hand control handle was pulled to the emergency position and the load extracted. All other extraction/deployment sequences were normal. No damage to load or aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock #9 checked good by maintenance. Cause unknown.				

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ANALYSIS: 102

WHAT WAS THE MALFUNCTION?

Load failed to exit with fully inflated extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not Given.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 400 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 23 Feet	12. SURFACE WINDS (Knots) 4 Knots	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Single A-22 CDS Training 940 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 CDS Container	27. TYPE PARACHUTE AND NUMBER G-12E(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 68-Inch Pilot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light, the western gear retriever(serial # 330) rewound for just under 3 seconds. The 80 lb. tie broke, but the gate failed to cut. The right retriever was used and the spring condition was good. The beaded chains were 4 7/8 in. and the cup was seated. The knife was relatively dull and did not catch on anything. There was turbulence encountered during the low level route. The switch gap was app. 1/8 in. The winch was last overhauled at McClellan AFB, CA on 11 Jan 98 and the serial no. is 330. No training was lost and the mission continued with the use of the left-hand retriever winch.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The retriever winch did not run for a full 3 seconds and the knife was not sharp. These two things combined were the suspected cause of this malfunction				

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ANALYSIS: 103

WHAT WAS THE MALFUNCTION?

Gate failed to cut (type XXVI gate).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The retriever winch did not run for approximately 3 seconds and knife was dull.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure timer works and knife is sharp.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 feet AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1790 Feet	12. SURFACE WINDS (Knots) 200 @ 10	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1060 lbs (rigged)	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Centerline

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, with the CDS switch armed and spring cup seated; the static line retriever winch failed to activate (did not move at all) and the gate failed to cut. Left retriever was used. Spring was in good condition. Beaded chains were correct length. Cup was seated in slot. Knife was sharp, limit switch was in limits, safety wired and did not engage. Pull test not required. Western Gear SLR did not even activate. Last inspection was 10 Jul 00, serial number 1149. Missed following two routes, assault, pilot proficiency training not completed and hours not flown.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The suspected cause is an electrical short in the winch or wiring system. The exact cause could not be determined. The primary loadmaster inspected and armed the CDS switch and ensured the spring cup was seated (western gear winch) and was verified by the secondary loadmaster IAW the checklist. The winch was operationally checked on landing and the malfunction could not be duplicated. The winch had last been inspected by maintenance on 10 July.

CONTINUED ON NEXT PAGE

ANALYSIS: 104

WHAT WAS THE MALFUNCTION?

Retriever failed to activate at green light.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient information.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Insufficient information.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 850 MSL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 170 MSL	12. SURFACE WINDS (Knots) 330 @ 5 Knots	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1250 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) Non-CVR
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER CDS (A-22 Container)	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Gate failed to cut at green light.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Beaded chain on newly installed winch was not symetrical and caused the winch to shut down before gate cut. Tactics loadmaster inspected the winch on return and found the left winch beaded chains were not symetrical. Recommend adherance to proper preflight inspection and check list procedures. Top chain was 3/8 inch longer than bottom chain. Retry of winch attached to load again cut off prematurely did not break 80# safety tie. Disconnected cable from load and ran 3 second test winch ran for 3 seconds. Preflight performed simply did not see beaded chain difference in length.				

CONTINUED ON NEXT PAGE

ANALYSIS: 105

WHAT WAS THE MALFUNCTION?

Gate failed to cut at green light.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper preflight of equipment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Retrain loadmaster on measuring of beaded chains.

TAR&M/SA VOL II

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 4726 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 4	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT F.S. 575 (Gate)
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light, the retriever winch did not activate. No damage to load or aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Upon investigation, it was found that the limit switch could be activated with only a slight movement of the compression spring. Suspect that the limit switch made contact at green light and would not allow the winch to rewind. The winch was found to be working correctly and in limits by -21 personnel.				

CONTINUED ON NEXT PAGE

ANALYSIS: 106

WHAT WAS THE MALFUNCTION?

At green light retriever winch failed to activate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch improperly set.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Reset limit switches.

**SUMMARY OF
SUPPLY AND EQUIPMENT DROPS**

2ND TRIANNUAL CY 2000

	PLATFORM LOAD		SINGLE CONTAINER		CDS		TOTAL	
Number of Drops	1721		412		2913		5046	
Number of Malfunctions	25		0		10		35	
Percentage of Malfunctions	1.5		0		0.34		0.69	
Malfunction Phases:	IP	EF	IP	EF	IP	EF	IP	EF
Extraction	2	9	0	0	1	3	3	12
Deployment-Recovery	3	5	0	0	3	3	6	8
Release	2	4	0	0	0	0	2	4

IP-Incorrect Procedures

EF-Equipment Failure

**SUMMARY OF
PERSONNEL PARACHUTE JUMPS**

2ND TRIANNUAL CY 2000

		C-17	C-130	C-141	OTHER	TOTAL
Nonmaneuverable	Number of Deployments	14,217	38,299	14,219	6,197	72,932
	Number of Malfunctions	1	7	3	0	11
	Percentage of Malfunctions	0.07	0.018	0.02	0.00	0.015
Maneuverable	Number of Deployments	76	8,044	912	6,220	15,552
	Number of Malfunctions	0	2	0	1	3
	Percentage of Malfunctions	0.00	0.024	0.00	0.016	0.019
Free-Fall	Number of Deployments	226	2,757	111	3,299	6,393
	Number of Malfunctions	1	14	0	12	27
	Percentage of Malfunctions	0.40	0.50	0.00	0.36	0.42
Total	Number of Deployments	14,519	79,100	15,242	15,627	94,577
	Number of Malfunctions	2	23	3	13	41
	Percentage of Malfunctions	0.013	0.046	0.019	0.083	0.043

**SUMMARY OF
PERSONNEL PARACHUTE MALFUNCTIONS**

1ST TRIANNUAL CY 2000

	NON- MANEUVERABLE	MANEUVERABLE	FREE-FALL	RESERVE
Number of Deployments	72,932	15,252	6,393	1
Number of Malfunctions	11	3	27	0
Towed Jumper	0	0	0	0
Broken Static Line	1	0	0	0
Entanglement	3	0	1	0
Failed to Inflate	7	0	1	0
Inversion	0	0	1	0
Pilot Chute	0	0	0	0
Semi-inversion	0	0	0	0
Suspension Lines	0	0	6	0
Other	0	3	18	1
Percentage of Malfunctions	0.015	0.019	0.42	0.00
Fatalities	0	0	2	1

*Injuries

**INJURIES OCCURRING ON PARACHUTE OPERATIONS
AS REPORTED ON DA FORM 285**

1 APRIL - 30 JUNE 2000

	C-17	C-130	C-141	UNKNOWN	TOTAL
PLF-Related Injuries	2	1	0	29	32
Main Malfunction	0	0	0	1	1
Misrouting of Static Line	0	0	0	2	2
Entanglements	0	1	0	0	1
Tree Landings	0	2	0	2	4
In Aircraft	1	0	0	0	1
Hazards on Drop Zone	0	0	0	2	2
Other	0	0	0	5	5
Insufficient Information	0	1	0	0	1

AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	1
SUPPLY AND EQUIPMENT DROPS	
Rail locks	11
Improperly operating ADS	1
Improperly operating doors or ramps	0
Release mechanism	0
Electrical system	0
CONTAINER DROPS	
Rollers	0
Type XXVI gate	0
Static line retriever	7
Center Line Vertical Restraint (CVR)	0
TOTAL	20

HOT POOP

SAFETY DIVISION SAFETY ALERT PARACHUTE FATALITY

A fatal accident occurred when a Modified Improved Reserve Parachute System (MIRPS) worn by a Jumpmaster student performing duties at the paratroop door of a C-130 Hercules aircraft accidentally activated.

Jumpmasters are again reminded of the necessity of remaining in the center of the paratroop door when performing Jumpmaster duties and particularly when attempting to return back inside the aircraft after conducting the clear to the rear of the aircraft. Jumpmasters must be aware that when returning back inside the aircraft, there is a possibility that the wind will force the body toward the trail edge of the aircraft. Jumpmasters must particularly resist this wind-effect when performing duties on the right paratroop door because this potentially places the ripcord grip of the MIRPS in the vicinity of the trail edge of the paratroop door. It is imperative that the ripcord grip does not come in contact with the lead or trail edge of the paratroop door. The Safety should be observing the inside of the aircraft for unsafe acts when the Jumpmaster performs a clear to the rear and should also observe the Jumpmaster. If the Jumpmaster's ripcord grip comes near or touches the trail or lead edge of the paratroop door, the Safety should tell the Jumpmaster of the deficiency after he comes back into the aircraft and before the next clear to the rear. The Safety should never attempt to grab or interfere with the Jumpmaster while the Jumpmaster is outside the aircraft or attempting to return inside the aircraft.

This is the second time since FY 97 that the accidental activation of a Jumpmaster's reserve parachute caused a premature exit resulting in a fatal injury. All Jumpmasters and jumpers are again reminded to remain aware of their equipment inside the aircraft and ensure they utilize proper ripcord grip awareness.

Other lessons learned from this accident:

- Jumpmasters must select individual hand placement where they can maintain stability while conducting a clear to the rear ensuring the ripcord grip does not come in contact with the paratroop door. Jumpmasters should position their hands in order that when returning into the aircraft after each clear to the rear that they not "brake" the trail elbow down and force themselves into the trail edge of the paratroop door. After determining the proper hand placement, Jumpmasters should resist repositioning their hands after each clear to the rear.

- The Jumpmaster student was at the right paratroop door and had the left adjustable leg strap on the Harness Single Point Release routed around the leg and the M1950 weapons case IAW the 82d Airborne Division ASOP Edition 5 with Change 3, Chapter 8, page 9-10. Adjustable leg straps must be secured so as to prevent undue movement of the ALICE pack due to wind and/or contact with the aircraft to include the paratroop door.

The information contained in this safety bulletin will be briefed to all airborne soldiers.

16 Aug 00